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# PERSONALITY FACTORS AND CHILD-REARING ATTITUDES OF UNWED, MARRIED AND ADOPTIVE MOTHERS

by

© CAROL FRANCINE LENNOX

A THESIS

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FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled "Personality Factors and Child-Rearing Attitudes of Unwed, Married and Adoptive Mothers," submitted by Carol Francine Lennox in partial fulfillment of the requirements for the degree of Master of Arts.

Paul T. Talbot
Supervisor

Date March 12, 1975

To My Family

and Friends.

## Abstract

The study was designed to determine the personality differences between unwed mothers and a control group of married mothers and also to determine the differences in child-rearing attitudes, using the Acceptance-Rejection and Control-Autonomy dimensions, between unwed, married and adoptive mothers. In the study sixty-five female subjects served in three groups: Group A (24 unwed mothers), Group B (19 Adoptive mothers) and Group C (22 Married mothers). All Ss completed two maternal attitude questionnaires, the Parental Attitude Research Inventory (PARI) and the U.S.C. Maternal Scale (USC), and a Questionnaire providing demographic data and descriptive information on the unwed mothers. The unweds and controls, both of similar socio-economic status, also completed a personality test, the California Psychological Inventory (CPI).

The PARI and CPI were factor analyzed and the thesis factors, when compared with those found in the literature, were similar enough to establish the stability of the factor structures. The unweds scored significantly lower ($p < .005$) on a CPI factor called "Adjustment by Social Conformity," indicating that the unweds exhibited significantly less socialization, maturity, self control, responsibility and conformity than the control mothers, and that the unweds have less ability to create a good impression on others than the control group.

Regarding the differences in child-rearing attitudes, using Anova the unweds showed a tendency ($p < .10$) to overtly accept their children less than the controls and a tendency ($p < .10$) to implicitly reject their children more than the controls. A stepwise discriminant analysis using all 15 variables and factors of the USC, PARI and CPI correctly

classified 71% of the unweds and controls, thus indicating that the profiles of the unweds and controls differed significantly on several factors and variables ($p < .01$). Comparing the controls and adoptives on child-rearing attitudes, it was found that the adoptives were significantly more authoritarian ($p < .05$) with their children than the controls, but there were no significant differences between the adoptives and controls on their level of acceptance or rejection of their children. Comparing the unweds and adoptives on child-rearing attitudes, it was found that the adoptives were significantly more authoritarian ($p < .05$) than the unweds, and that the unweds scored significantly higher ($p < .05$) than the adoptives on covert rejection and overt rejection of the child and the unweds scored significantly lower ($p < .05$) than the adoptives on overt acceptance of the child. Because the more rejecting attitudes towards the child of the unwed mother could not be attributed to socio-economic differences between the unwed and adoptive mothers, the rejecting attitudes of the unwed mother were attributed to psychological and sociological variables other than socio-economic status. A stepwise discriminant analysis performed on the eleven variables and factors of the USC and PARI for the three groups resulted in correctly identifying 69% of the subjects indicating that the child-rearing profiles of the three groups differed significantly ($p < .01$) on several variables and factors.

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## INTRODUCTION

The comments expressed by Bird at the First National Conference on Family Planning in Canada (1972) give a general idea of the magnitude and gravity of the problem of illegitimacy. Bird points out that the rise in the illegitimacy rate is a matter of serious concern today because it doubled between 1959 and 1969. The number rose from 4.2% to 9.2% of live births.

It should be noted that between 1970 and 1971 there was a drop in the illegitimacy rate in Canada of from 9.6% to 9.0% and in Alberta of from 12.8% to 11.9% (Manley-Casimir, 1973, p. 9). Hobart attributes this downward trend in Alberta mainly to the liberalized policy on abortion since the number of therapeutic abortions rose from 1,050 in 1970 to 3,169 abortions in 1971.

Further, Rouslston, speaking at the First National Conference on Family Planning, has linked the number of "unwanted" children born in Canada to an unhappy childhood and a lack of the development of the child's potential.

> "Canada has, as a country, approximately 350,000 live births per year at this time. Yet sixty to seventy thousand of these births are unwanted pregnancies. What those sixty to seventy thousand unwanted pregnancies do to a total society cannot be analyzed in detail. No matter how statisticians, demographers, or sociologists work, the impact can not be detailed. We do know one simple fact, and that is that pregnancies bring with them some small measure only of human happiness and health, and their adverse impact on family happiness and security and on society in general is enormous."

> "Canada has approximately thirty thousand babies born out of wedlock each year: an increase of one hundred percent in the last decade. What is the future of the great majority of these children?"

Britain's National Child Development Study (Time, Nov. 12, 1973) of illegitimate children gives an indication of what the "future of the great majority of these children" will be. The study indicates that the unique relationship between the unwed mother and her child entails a particular type of socialization pattern which tends to result in emotional and behavioral problems for the illegitimate child. The study compared 458 illegitimate children raised by their mothers, 182 illegitimate children raised by adoptive mothers and 15,563 legitimate children. The results showed that by the time the illegitimate children who had remained with their mothers reached the age of seven, they were at a distinct disadvantage. The results showed that the unwed mothers had begun to move socially downward, and that the children's behavior and schoolwork were deteriorating. This finding is particularly striking since the researchers controlled for socio-economic status between the three groups.

The study further reports that the disadvantaged children, illegitimate children being included, compared unfavorably physically, intellectually and socially with the 'ordinary children'. For example, the study found the disadvantaged children to be on the average three and one-half years behind the ordinary children in reading scores and teachers classified about a quarter of the disadvantaged children as 'maladjusted'.

Other findings of the study included the following:

> "Disadvantaged children were notably short for their age, and four times as many of them suffered marked hearing problems as did the other children. The disadvantaged were five times as likely to be absent from school for long periods because of ill health or emotional disorders. One in 14 needed special education, compared to one in 80 among ordinary children."

> "One out of eleven of the disadvantaged, but only one in 300 of the ordinary children, had had contact with the juvenile probation service. In fact, the disadvantaged use social service agencies so heavily that the report estimates that a 2% reduction in the number of disadvantaged would produce a reduction of between 11% and 14% in the number of "calls" on the agencies."

In order to account for the poor social, intellectual and physical development of the disadvantaged child, it is necessary to look to the unwed mother's personality and maternal attitudes. Larson (1970) states that two of the most important parental factors influencing the child's development are the 1) psychological resources or personality characteristics of the parent, and 2) the parental child-rearing orientations of support (love or hostility) and control (authoritarianism and permissiveness). The present study will concentrate on these two dimensions of the parental personality and the parental child rearing attitudes of support and control. Generally, Lidz (1972) stresses the impact that the family has on the nature of the child's development as he states that the,

> "Family is the primary teacher of social interaction and emotional reactivity. It teaches by means of its milieu and nonverbal communication more than by formal education. The child's sources of identification and self-esteem derive from the family and markedly influence the developing patterns of symbolic functioning. However, the child is also exposed to the parental interpretation of reality and the parents' ways of communicating. Parental interpretations may have limited instrumental utility when they primarily serve to maintain the parents' own precarious equilibrium" (p. 278).

Several theoriests and researchers have identified particular personality patterns that belong to unwed mothers as a group. Giel and Kidd (1965) studied the frequency of psychiatric symptoms of unwed college students who became pregnant. With regards to unwed college girls becoming pregnant, Giel found that emotional ill health fre-

quently antedated their pregnancies.

In Giel's study, detailed psychiatric records were kept of all of the students seeking help during the university year. For the study, an analysis and diagnosis were carried out using the psychiatric consultation records of the experimental group of 57 later pregnant unmarried women and the control group of 57 unmarried women who did not become pregnant out of wedlock. The analysis and diagnosis of the records was carried out by a researcher who did not have prior knowledge of which records represented the experimental or control groups. Also, only consultation records prior to the pregnancy were investigated.

The results of the study indicate that significantly more ($\chi^2$ = 11.9, 1 d.f., $p < 0.001$) of the pregnant unmarried students (45.6%) had consulted their doctor with conspicuous psychiatric disability in the first year of university than had the controls (15.8%). Also, the later pregnant students had higher consultation rates than the controls which is in keeping with a neurotic personality type.

Giel found that the factor differentiating the neurotic students from the non-neurotic and control students was that of an unstable family background in the neurotic group. Giel states that,

> "The most common pattern seen was that where an unstable home background induced a neurotic need for a secure relationship, one rich in an understanding and a degree of interpersonal communication that the young women had lacked previously. In most cases the need for emotional security that sought its fulfilment in the sex relationship was largely unconscious. Among others, their own awareness of neurotically-endowed loneliness and social inadequacies had brought about a conscious hope for emotional security to result from the deeper contact of the sex relationship" (p. 593).

Giel points out that Eyzenck (p. 591) using psychological tests has found unmarried mothers to be more neurotic and extraverted than married mothers. Farnsworth (Naiman, 1966, p. 456-466) in an unpub-

lished paper has also found that college students who become pregnant out of wedlock are more disturbed emotionally than a group of controls of college students who did not become pregnant.

Middleman (1970) points to still other factors influencing the unwed mother which tend to create a crisis situation for the unwed mother. Middleman looks upon teenage unwed mothers from an Eriksonian point of view which emphasizes the various stages or crises involved in the developmental process from infancy to old age. Middleman states that the unwed mother is simultaneously facing the identity crisis of adolescence, the crisis of generativity or creating and nurturing a new life, and the crisis of intimacy. Thus, the unwed teenage mother during and after pregnancy may be described as experiencing tremendous psychological crises which, if not resolved, may result in identity diffusion rather than a sense of identity; isolation rather than intimacy; and self-absorption rather than generativity. Furthermore, a mother suffering from self-absorption, social isolation and identity diffusion will have little to offer a child in terms of warmth, concern and a sense of security.

Vincent (1961) has also studied the personality pattern of unwed mothers. Vincent's sample of unwed mothers was made up of 189 unwed mothers attending Booth Memorial Hospital (Salvation Army Maternity Home) in Alameda County, and 373 unwed mothers in Highland Hospital in Alameda County in 1954. The women answered a general questionnaire and the California Psychological Inventory (CPI). Vincent found many significantly different personality qualities between those unwed mothers who kept their children and those who surrendered their children for adoption.

The main results of Vincent's analysis of the personalities of the unwed mothers was that on a group basis the unweds who kept their children had a significantly less positive CPI profile than those who released their children for adoption. The unweds who kept their children had significantly lower scores ($p < 0.01$) than the unweds who surrendered their children on thirteen of the eighteen CPI scales. The only scale on which the unweds keeping their children was higher was on the "Femininity" scale. An item analysis showed that, "the higher Fe score of those who kept their children was more a manifestation of passive, impulsive and retiring behavior and of an avoidance of responsibility and leadership than a reflection of feminine warmth and concern for others" (p. 187).

With regard to family background, Vincent concludes, "On a group basis, the unwed mothers who kept their children had significantly less positive intra-family relationships and home situations than those who released their children for adoption" (p. 188). Vincent also found, "The unwed mothers who kept their children came from unhappy and mother-dominated homes" (p. 189). This evaluation was based on questionnaire data indicating that the parent's marriage was unhappy and full of arguments and open conflict and that the mother was dominant in decision-making. It was reported that the unweds keeping their children were disciplined mainly by their mothers who used physical punishment and ridicule before thirteen years of age and ridicule after thirteen years of age. "Those who kept their children reported that they did not get rewards, love, or affection from either parent" (p. 190) and that, although they had felt close to their mothers prior to age thirteen, after age thirteen they did not feel close to anybody. They also felt

that they were disciplined more harshly and liked less than their siblings.

The unwed mothers who kept their babies were slightly older in mean age and less educated. There was a definite pattern for the unweds keeping their children to come from broken homes which were mainly the result of a death of one parent.

It was also found that the "unwed mothers who kept their children had less self-confidence and experience in heterosexual relations, and more negative attitudes concerning sex than those who had released their children" (p. 190). Vincent states that the unwed mothers who kept, "appeared to be either relatively isolated from, or in revolt against the traditional sex mores and the stigma attached to deviant sexual behavior" (p. 190-191). This statement is based partially upon the fact that very few of the unweds (6%) who kept stated that they would not have illegitimate children if they could relive their lives again (as opposed to 86% of the unweds who surrendered their children); and upon the fact that most who kept (85%) stated that they had never been in trouble because of their sexual behavior (as opposed to the rate of 3% for the unweds who surrendered).

Vincent divided the group of unwed mothers keeping their children into three main groups which tend to isolate different circumstances or reasons for the women deciding to keep their children. The first group has "minimal positive identification with individuals and social groups who might communicate the traditional sex mores and the stigma concomitant with giving birth out of wedlock to them in a meaningful way" (p. 193). The second group tries to "show their desperate need for at least one primary relationship in which they are needed and loved by

someone whose dependence on them makes it safe for them to receive and return that love in their own ways" (p. 193). These girls came from a hostile and punitive family background and they felt anxiety and doubts concerning their personalities, their appearance and their chances of ever getting married. Vincent states that the third group of mothers keeping their children have a high potential for being good mothers. He states that a "minority of unwed mothers keeping their children have positive personality profiles and experiences of family life; they are motivated to keep their children a) as extensions of positive, meaningful relationships with sexual mates whom they love, and b) as expressions of their capacity and desire to love and rear their children" (p. 195). The above results tend to substantiate Vincent's original "hypothesis that the majority of unwed mothers who keep their children lack the potential for 'good motherhood'. . ." (p. 199). Vincent concludes that the "above CPI and family questionnaire data tend to corroborate the opinion expressed by many individuals who provide counseling, casework, and therapeutic services for unwed mothers; namely that (although there are individual exceptions) many of the unwed mothers who are the most insistent on keeping their children appear the least likely, because of personality and family life experiences, to become adequate mothers" (p. 191).

There is a major methodological problem with Vincent's study since the unweds who kept their children were found to be from families of lower socio-economic background than the unweds who surrendered. Consequently, some of the differences found between the two groups may be attributable to the differences in socio-economic status rather than to whether or not the unweds kept or surrendered their children.

In other words, had Vincent controlled for socio-economic status, he may not have found the above stated significant differences between the unwed mothers who kept and those who surrendered.

There is a large body of research which specifies the differences in child-rearing practices and child development which vary with the mother's socio-economic status. For example, Chilman (1968); and Sears, Macoby and Levin (1957) found that mothers of lower socio-economic status tend to be more punitive, restrictive and demanding of their children. They apply more pressure on the child with regard to the child's expression of sex, aggression and dependency. Whereas, the middle class mothers tend to be more permissive, less demanding and more reward-oriented rather than punishment-oriented. Lower class mothers also tend to be colder to their children than middle class mothers, and lower class mothers use object-oriented techniques of discipline which the Sears group have found to be less effective for rapid development of conscience (or inner controls). Middle class mothers, on the other hand, tend to be more accepting and warm with their children and they use love-oriented techniques of discipline. Also related to socio-economic level, Corrigan (1970) and other researchers have found that the rates of psychiatric disorder vary inversely by income, with higher rates of emotional disturbance accompanying lower income groups.

Sears has found that when the child grows up and has children of her own, she tends to use the same child-rearing practices as those to which she herself was exposed. For example, the lower class child will continue to use the child-rearing practices of the lower class. Sears has also found that the child-rearing practices of the different socio-economic classes have differential effects upon the child's personality

development. For example, Sears has found that the punitive orientation of the lower class mother is ineffectual in controlling the child's behavior; for instance, punishing the child's dependency behavior for the purpose of eliminating it tends to increase the amount of dependency exhibited by the child. Another example is the following: using physical punishment in order to try to eliminate aggressiveness in the child tends to increase the level of aggressiveness exhibited by the child.

Because of the differences in the maternal child-rearing attitudes and the child's personality development which vary as a result of socio-economic status, it is necessary to equate comparison groups of unwed mothers and control groups with respect to socio-economic status. Because Vincent did not control for socio-economic status, his results are of questionable validity. The present study attempted to control for this major methodological error by obtaining Ss of similar socio-economic status. Thus, the present study attempted to discover whether or not the relationships found in Vincent's study still hold.

The present study differs from the one carried out by Vincent inasmuch as the control group is one of married mothers of lower socio-economic status rather than unwed mothers who surrendered their children. The author found that it was extremely difficult to obtain a sample of unwed mothers who had surrendered their children. This was because the government hesitates to release the names of unweds who gave up their children for reasons of the mothers' right to privacy.

In addition to empirical studies, there is an abundance of anecdotal material that supports the findings of Vincent. Wimperis (1960) reports an anecdotal finding concerning the unwed mothers who keep as opposed to

those who surrender their children for adoption which is similar to that of Vincent's study. With regard to a study of unwed mothers in the County of Midboro in England, Wimperis reports that when the teenage unwed mothers had a relatively normal home, the baby was usually adopted. However, when the unweds came from unstable or broken home backgrounds so that it was almost impossible for them to give their children a normal unbringing, most of them kept their babies. Of twelve unweds from broken homes, only three parted with their children and "the other nine clung to their babies, possibly sometimes feeling, as one mother expressed it, that it was the only thing that 'belonged to her' in an empty, friendless world" (Wimperis, 1960, p. 272-273).

Wimperis goes on to describe clinical findings relating to some of the difficulties faced by the unwed mother in trying to raise her child alone and the negative implications for the child's own development.

> Dr. Christine Cooper describes the life of many of these (illegitimate) children.
>
> > "The child is cared for in constantly changing circumstances, being moved about among relatives and friends, taken round to different lodgings by the mother, or put in and out of day or residential nurseries. He often has periods in the care of the local authority's Children's Department, and finally may be removed from his mother's care to an institution or foster home. Here his behavior is usually difficult or delinquent, and this may result in further changes of care. This unfortunate fate is suffered by many illegitimate children and there is an urgent need for steps to be taken to prevent such treatment. The mother is usually vacillating in her attitude to the child, being alternately over-protective and neglectful. He is unable to attach himself permanently to his mother or reliable substitute, and develops into the affectionless, delinquent adolescent who, as Bowlby has pointed out, only too often produces illegitimate children himself and the cycle is repeated" (Wimperis, p. 259-260).

If the unwed mother does in fact reject her child, her negative attitude towards the child can effect many of her child-rearing

practices and the child's own development. Symonds, Kinstler, Baldwin, Kalhorn and Breese (Medinnus, p. 91); and Horney (1937) regard the parental attitude of either acceptance or rejection toward the child as a basic dynamic or determinant of other parental behaviors toward the child. Horney finds that covert rejection or a lack of genuine care and affection for the child can be more harmful to the child's personality development than overt rejection on the part of the parent. Hurley (1965) has demonstrated an inverse relationship between parental attitudes of rejection for the child and the child's level of intellectual development. He also emphasizes the research evidence indicating that a rejecting, punitive attitude towards children results in a "brutalizing and intellectually impoverishing influence upon humans" (p. 113).

More unwed mothers are keeping their children than ever before in Canada and the United States; however, there are indications that a proportion of these unwed mothers are later surrendering their children because of an inability to cope with their situation (Newsweek, Sept. 18, 1971). In her study on the problems of the one parent family in Canada, Guyatt has shown that, "These single parents revealed their fear of loneliness, loss of self-esteem, feelings of failure, guilt, depression, hostility, bitterness and the feeling of being overwhelmed by their situation." The lack of self-esteem, depression and financial pressures could produce parental rejection of self or parental rejection of the child, either of which could lead to the child's rejection of self (Medinnus, p. 155).

Helper, Cohen, Beiterman and Eaton (1968) also found that, "Certain theories and some clinical data. . . suggest that life stress before or

during pregnancy may interfere with the woman's psychological affiliation with the fetus, and thereby jeopardize her ability adequately to mother the baby after birth" (p. 183). Helper's study was designed to determine the kinds of life events women judge to impose particularly great difficulties on adjustment to pregnancy.

The groups of women chosen for Helper's study were comprised of various religious backgrounds, socio-economic status, ages and pregnancy status. The correlations between the various groups of women concerning the extent of agreement on the difficulty level of life-events was generally high with over one half of the correlations above 0.85 for the list of events referring to the during-pregnancy stress situations. The results of the study indicate that circumstances representing major rejection of the pregnancy either by the father of the child or by society as a whole create the greatest amount of difficulty in acceptance of the pregnancy by the woman. It was found that four of the five top-rated items clearly fit this category.

It may be pointed out that with the unwed mother, the father of the child has in many cases rejected the pregnancy and that generally society also rejects the idea of illegitimacy which does not conform to middle class standards. Rashbaum, Rehr, Paneth and Greeberg (1963) states that, "In our society, to become pregnant out of wedlock is considered an act of social irresponsibility" (p. 11). Further, the Canadian Council (1971) interviewed unwed mothers and found a general feeling of ostracism among the unwed mothers. Also, Bernstein (1963) states that the, "total situation for many unmarried mothers includes enduring experiences of poverty and discrimination and having a distrust of the future. . ." (Bernstein, p. 54). Psychodynamically

oriented theoriests (Medinnus, p. 155) would conclude that the general rejection of the pregnancy by both the father and society would tend to lead to difficulties for the mother in accepting her child.

Clothier (1943) explains the unwed mother's early relation to her child by differentiating between fully experienced maternity and mere physiological maternity. Fully experienced maternity is defined as the inner conviction of having finally been granted a long-sought wish of having a baby. It also includes the achievement of satisfaction not only from being loved by the husband but also from actively nurturing and loving. On the other hand, physiological motherhood is divorced from a warm feeling of self-satisfaction and an almost overwhelming outwardly directed tenderness. Physiological motherhood is merely the woman's awareness of biological pregnancy without an accompanying feeling of happiness.

Clothier connects the ambivalence or rejection of the child by the unwed mother to the lack of development of fully experienced maternity. Most unwed mothers merely experience physiological maternity.

The second important factor besides personality to consider in studying unwed mothers is their child-rearing attitudes. Devereux (1970); Schaefer, Bayley and Bell (1960); Becker (1964); and Zuckerman, Ribback, Monashkine and Norton (1958) consider maternal behavior to be describable in terms of two primary dimensions: love-hostility (or acceptance-rejection which is described above) and control-autonomy. The "control"-oriented behavior is analogous to an authoritarian or autocratic orientation whereby the maternal behavior is characterized by rigidity, conventional attitudes, strict discipline and physical punishment. The "autonomy"-oriented maternal behavior is synonymous

with a humanistic or democratic orientation in which there is less emphasis on discipline, love-oriented punishment, and the child is encouraged to express himself and to develop his personality.

Schaefer has formulated the "Circumplex Model for Maternal Attitudes" which combines the two major dimensions of love-hostility and autonomy-control. The following diagram illustrates Schaefer's Model:

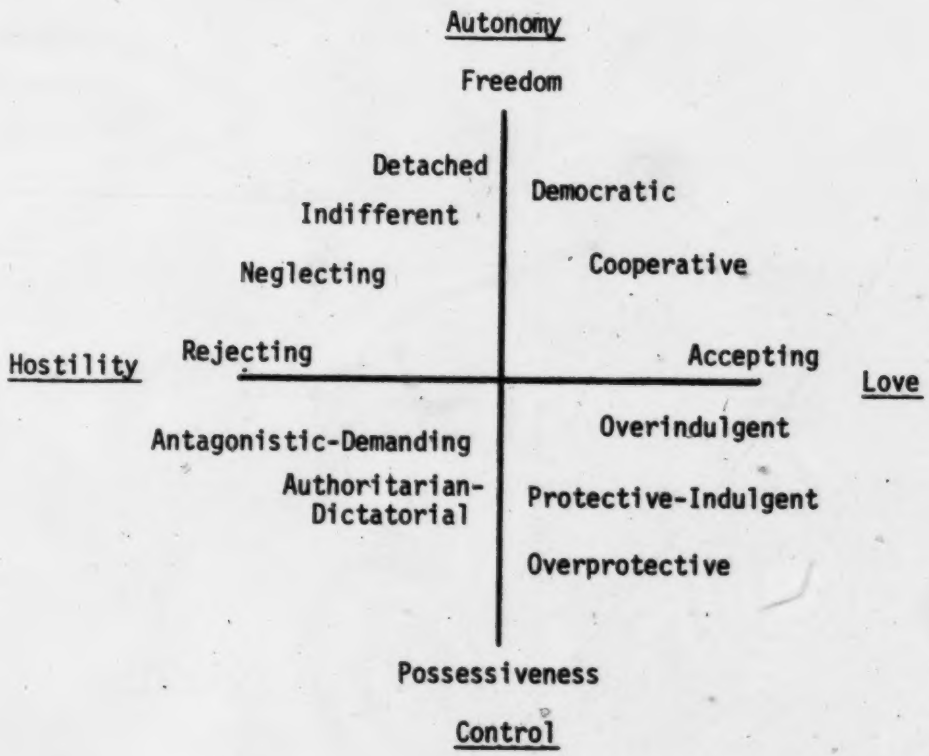



Figure I. A Theoretical Model for the Circumplex of Maternal Behavior (Source: Schaefer, 1955, p. 232).

Becker (1964) has reviewed the research regarding the effects of the parental child-rearing attitudes of the four quadrants of Schaefer's model on the child's personality development. According to the research, a combination of Love and Control tends to produce

children who are submissive, dependent, polite, friendly, conforming, compliant but not creative or aggressive. A combination of Love and Autonomy tends to produce a child who is socially outgoing, creative, aggressive, independent, friendly and who can take adult roles with ease. A combination of Autonomy and Hostility tends to produce children who are delinquent, non-compliant, aggressive towards others and who are generally problem children. Hostility and Control, when combined, tend to create neurotic, quarrelsome, socially withdrawn children who are shy with their peers and who find it difficult taking adult roles.

Many research studies have demonstrated the effects of authoritarian and democratic parental behavior on the personality development of the child. Watson (1965) has studied the effects of parents stressing strict discipline and permissiveness on the personality development of the child. In Watson's study, the children were well loved and accepted in both the disciplined and permissive home environments. The results of the study indicate that the two groups of children did not differ on dimensions of self-control, inner security or happiness; but that they did differ on the following dimensions: the children raised in the permissive environments exhibited more iniative and independence; better socialization and cooperation; less inner hostility and more friendliness; greater spontaneity, originality and creativity.

In Bayley and Schaefer's study (1965) of the relation between autocratic and democratic mothers and their children's behavior, they found that loving, accepting mothers tend to have calm, happy sons and that controlling, hostile mothers tend to have excitable, unhappy sons. The girls in the study showed more variability of behavior; however, the maladjusted girls in the study tended to have hostile, controlling

mothers who were punitive and irritable. Schaefer has found greater consistency over time for the love-hostility (acceptance-rejection) dimension than for the autonomy-control dimension. In other words, the mother's degree of affection for the child remains relatively constant throughout the years; however, her methods of control of the child change with time as the child grows older and as his needs for independence and autonomy increase.

Loevinger has also studied child-rearing practices of mothers using the democratic-autocratic dimension as a basis for studying maternal attitudes. Loevinger stresses that "good," loving mothers may be either democratic or autocratic in their orientation to the child and that the child's personality may determine which maternal approach is more appropriate. For example, some children feel more comfortable with a more structured, disciplined environment; whereas, other children seem to prefer a permissive environment in which they may express their individuality.

Corrigan's study (1970) of the personality and child-rearing attitudes of unwed mothers illustrates the necessity for including measures of both the love-hostility and autonomy-control dimensions. Corrigan studied only the autonomy-control dimensions so that although the unweds appeared to be more permissive than the controls, it was not possible to determine whether the permissiveness was a concomitant of an accepting-cooperative orientation or of an indifferent-rejecting orientation.

Corrigan's study was comprised of 90% Puerto Rican and Negro subjects and 10% whites from a lower socio-economic background. Consequently, the results of her study are not generalizable to an all-

white population since the American Negro views the notion of illegitimacy differently from the middle class white (Rainwater, 1972). However, Corrigan concludes her study by stating that the results of her study and "the results of other studies have raised the question as to whether permissiveness has been confused with rejection or disinterest" (p. 66). The present study will attempt to answer the above question of whether permissiveness has been confused with rejection or disinterest since the dimensions of both acceptance-rejection and autonomy-permissiveness will be assessed.

## Hypotheses

1. The unwed mothers have more overt and covert rejecting attitudes towards their children than either married mothers or adoptive mothers.

2. The unwed mothers have fewer psychological resources or less positive personality profiles as measured by the California Psychological Inventory than the married mothers of comparable lower socio-economic status.

3. The unwed mothers and married mothers will have authoritarian child-rearing attitudes since they are all of the lower socio-economic status. The adoptive mothers will have more permissive child-rearing attitudes since they are more representative of the middle socio-economic status.

4. The married mothers of lower socio-economic status have more rejecting attitudes towards their children than adoptive mothers of middle socio-economic status.

## Method

### Design

The three groups of mothers chosen for the study varied on two factors: married or unmarried, and biological or adopted child. These two factors may be combined into four possible groups, the following three of which were chosen for the study: 1) the unmarried mothers who kept their children are the main experimental group of interest (Group A); 2) the married mothers who kept their biologically own children served as a control group for the unwed mothers (Group C); and 3) the married mothers who adopt their children are included because this group served as a group of mothers who presumably love and accept their children (Group B). Also, the adoptive group is included for practical purposes since the social worker is often faced with the decision of whether or not it would be "better" for the illegitimate child to live with the natural or adoptive parent; thus, it is interesting to determine what, if any, differences actually exist between these two groups of mothers. The fourth possible group of single women who adopt children was not included in the study because there are few mothers in this category and consequently they are relatively inaccessible.

### Subjects

There were 65 Ss who served in this study.

In Group A (unwed mothers), there were 24 Ss who were contacted through MOVE, an association for the assistance to unwed mothers or through a public health clinic where the public health nurses informed the mothers of the study and the mothers volunteered to participate in the study. The majority of women attending MOVE were either working

or on public assistance, or working and receiving additional aid from public assistance. Most of the families or origin of the unwed mothers were of lower class backgrounds and all of the unwed mothers were presently in the lower class. All of the unwed mothers were living on their own with their children as a one-parent family. The majority of unwed mothers were tested through MOVE since this was the only organization in the City of Edmonton from which a sample of unwed mothers was readily available.

There were 19 Ss in Group B (adoptive mothers) who were contacted through the provincial government. The government sent out letters to adoptive mothers appealing for their cooperation in the study. The letter sent to the adoptive mothers appears in Appendix A. Only those adoptive mothers who volunteered to participate in the study were included in the study. The government had already screened the adoptive mothers before they were considered eligible to adopt a child. These mothers were selected in terms of their middle socio-economic status and in terms of the government choosing only those women who would probably accept and love their adopted children. Consequently, the adoptive mothers used in the study were of middle socio-economic status and probably accepting and loving with their children.

There were 22 Ss in Group C (married mothers) who were contacted primarily through the provincial government. The government sent letters to married mothers receiving public assistance requesting them to participate in the study. The letter sent by the government appears in Appendix B. Only those married mothers who volunteered to participate in the study were included in the study. This group of married mothers receiving public assistance was particularly chosen as a con-

trol group since they matched the unwed mothers socio-economically. The remainder of Group C were contacted through public health clinics and volunteered to participate in the study.

It should be noted that a volunteer effect may have effected the results of the study. Because the adoptive mothers and control mothers volunteered for the study it is likely that they were very enthusiastic mothers who were enjoying participating in the study. In contrast, the unwed mothers were solicited more directly by the author and director at MOVE and, consequently, the unwed mothers may have been less enthusiastic about the study. Thus, a selection effect may have occurred as a result of the volunteer effect inasmuch as a more representative sample of unwed mothers was probably selected; whereas, primarily enthusiastic adoptive and control mothers were selected who may not have represented the population as a whole.

Materials

Hollingshead's Two Factor Index of Social Position (Hollingshead, 1957). The socio-economic status of the Ss was established by applying Hollingshead's "two factor index of social position." The two factors refer to occupation which is given a factor weight of 7 and education which is given a factor weight of 3. Each occupation is given a scale score which ranges from 1 to 6 with, for example, higher executives and major professionals receiving a score of 1 and semi-skilled employees receiving a score of 6. In like manner, the educational level of the individual is given a scale score with, for example, graduate professional training receiving a scale score of 1 and less than seven years of school receiving a scale score of 7. The "index of social position score" is calculated by multiplying the scale score by

the factor weight for both the education and occupation, and then by adding these two scores. Hollingshead has attempted to validate the assumption of a meaningful correspondence between the estimated class position of people and their social behavior by the use of factor analysis.

The California Psychological Inventory (CPI) (Gough, 1969). The CPI consists of 18 scales and it is made up of 480 questions. The mean reliability established for the 18 scales in one study of high school females was 0.66. A low score on any of the 18 measures indicates a low degree of that personality quality and a high score indicates a high degree of the quality. Generally, high scores indicate a more socialized, mature, intelligent and positively motivated personality. The CPI was chosen because it provides a measure of the psychological resources of the mothers' personalities, and because it provides a replication of Vincent's study.

Parental Attitude Research Inventory (PARI) (Schaefer, 1958). The PARI is a paper and pencil test consisting of 23 scales measuring parental attitudes. It is made up of 115 questions. Schaefer has found that the reliabilities for the scales of the PARI are satisfactory for multivariate research on group differences (Schaefer, 1958, p. 351). Schaefer states that the predictive validity of the scales is suggested by the many research studies carried out using the PARI which tend to support the hypotheses of the studies. Factor analyses of the PARI yield two primary factors (Zuckerman, 1958): love-hostility and acceptance-rejection. Consequently, the PARI was particularly suitable to the present study because it provides measures of both factors of Schaefer's Circumplex Model and also because Schaefer has found that

the PARI is sensitive to maternal attitudes as they vary with socio-economic status. The PARI questions and the code for scoring the responses appear in Appendix C.

U.S.C. Maternal Attitude Scale (Kinstler, 1961). The U.S.C. maternal Attitude Scale is a projective questionnaire measuring the following four maternal child-rearing attitudes of the mother: covert and overt acceptance and rejection of the child. The U.S.C. Maternal Attitude Scale was particularly appropriate for this study since it relates to the acceptance-rejection dimension of Schaefer's Circumplex Model by providing an operational definition of maternal covert and overt acceptance and rejection of the child. This test has been used by Kinstler to differentiate mothers of stutterers from mothers of non-stuttering children since it was found that mothers of stutterers reject their children covertly but accept them overtly. This study helps to establish the predictive validity of the scales. The U.S.C. Maternal Attitude Scale was made up by 26 experts, including clincial psychologists, psychiatrists, professors of speech pathology, professors of psychology, and speech pathologists in private practice who evaluated the items of the scale with regards to whether or not the items measured covert or overt acceptance or rejection. This test provides a second measure of maternal acceptance and rejection in addition to the love-hostility measure from the PARI, thus providing a means of estimating the validity of the love-hostility measure of the PARI. The U.S.C. Maternal Attitude Scale and the scoring code answers appear in Appendix D.

Questionnaire. A questionnaire very similar to that administered in Vincent's study was administered which provided basic demographic

information such as age, education, occupation and socio-economic status. The questionnaire also included questions concerning the Ss family background and dating experiences, as well as questions relating to the unwed mother's current child-rearing and family life problems. Some of the questionnaire items were included for other agencies and only those questionnaire items which were particularly important for the present study were analyzed. The Questionnaire appears in Appendix E.

Procedure

Group A (Unwed Mothers). Subjects were tested at their own homes. The author or representative at MOVE gave each S the battery of tests and asked the S to complete the tests within a week. Upon completion, the tests were put into a self-addressed and stamped envelope provided by the author and were mailed back to the author.

Group B (Adoptive Mothers). One hundred letters were sent to adoptive mothers by the provincial government requesting that they telephone the author if they were interested in voluntarily participating in the study. Upon receiving the phone calls, the author made appointments to meet the Ss at their own homes. The author gave each S the battery of tests except for the CPI and asked the S to complete the tests within a week. The Ss then returned the completed tests to the author by mail in a self-addressed and stamped envelope provided by the author.

Group C (Married Mothers). One hundred letters were sent to married women receiving public assistance from the provincial government requesting that they telephone the author if they were interested in voluntarily participating in the study. Upon receiving the phone calls the author made an appointment to meet the S at her own home. The author

gave each S the battery of tests and asked the Ss to complete the tests within a week. The Ss then returned the completed tests to the author by mail in a self-addressed and stamped envelope provided by the author.

Scoring

The CPI, PARI and U.S.C. Maternal Attitude Scale were scored by hand according to the criterion set by the test makers.

Methods of Analysis

The CPI and PARI were factor analyzed in order to achieve the following purposes: to determine the interdependencies among the set of variables in the CPI and in the PARI; and to achieve a parsimonious description of the data by establishing factor scores which were used in a discriminant analysis.

The factor model used was the principal components factor analysis (Veldman, p. 206-236) using the principal axes factor technique. The principal axes technique extracts orthogonal components of variance in the data, delineates the basic dimensions of the vector space defined by the data matrix, and maximizes the variance in each successive column of the matrix.

An R-Type factor analysis was performed on the PARI and CPI data. This type of analysis consists of factor analyzing a matrix with variables in the columns of the matrix and cases in the rows.

The number-of-factors criterion used was an eigenvalue of 1.0. Thus, factor extraction ceased if a root was obtained which was less than the criterion eigenvalue of 1.0.

The Varimax (orthogonal) rotation technique was applied to the principal axes factor loading matrix in order to achieve a simple structure solution.

The distribution transformation employed by Veldman's Factor program was the transformation of all scores to z-scores in order to achieve greater similarity of the variables with respect to the centrality and variability of the variables. The matrix transformation employed was the following: the column vectors of factor loadings in the matrix were normalized by using the eigenvalues to yield a new matrix of eignvectors. Veldman's Factor program also computes the factor scores for each subject.

Veldman's "Relate" (Veldman, p. 236-245) program was used to compare the factors found for the CPI and PARI for the thesis data with those factors found in the literature. This program computes a series of cosines which indicate the extent of correlation between comparable factors derived from different studies.

The factors derived from the thesis PARI data were compared with those found in a study by Zuckerman (Zuckerman, 1958). Although Zuckerman extracted three factors in his study, the matrix of correlations among variables was factor analyzed by the present author using Veldman's "Factor" program (Veldman, p. 206-236) and five factors were extracted. Zuckerman's data were factor analyzed using Veldman's program in order to eliminate the variability between Zuckerman's factors and the thesis factors which would have been caused by using different factor analytic programs.

A discriminant analysis (Sampson, 1970) was computed on the U.S.C. variables and the PARI and CPI factors in order to establish the degree of discrimination between the profiles of the unwed and control groups. A second discriminant analysis was computed to establish the degree of discrimination between the profiles of all three groups for the U.S.C.

variables and PARI factors.

## Results and Discussion

### Demographic Data on Subjects Derived From the Questionnaire

The mean age for the three groups differed in the following ways: the mean age for the unwed mothers was 19-20 years; for the control group it was 26-30 years; and for the adoptive group, it was over 30 years. Although the author requested younger women as a control group, if the women were married and on welfare, they were generally older than the group of unwed mothers.

The primary reason that the adoptive mothers were older than the unwed mothers is probably that a married couple often attempts to have a child of their own before they finally choose to adopt a child.

Sears (p. 438) concludes that the mother's age is a minor influence in child rearing. Also, Sears concludes that social status is far more important than age in determining the severity of the mother's child rearing practices. Consequently, although there are age differences between the three groups of mothers, the effects of age may be considered minimal in relation to the effects of differences in socio-economic status which have been controlled between the unwed and control groups in the study.

The average number of children for the unweds is 1.04, for the control group the average is 1.59, and for the adoptive mothers it is 2.42. These differences would be expected because the majority of unwed mothers have only one child and the majority of married mothers have more than one child. Sears (p. 436) found family size to be a minor influence on child rearing practices in comparison to the social class and education of the mother which were controlled in this study. Consequently, although there are differences in family size between

the three groups, the effect may be considered of minor importance.

The three groups differed markedly with respect to the monthly income which was under $300.00 per month for the unwed mothers, $400.00-$600.00 per month for the control group and over $600.00 for the adoptive mothers. These differences would be expected since the unwed mothers belong to the group of female one-parent families which generally experience financial problems. The poor income level of the unwed mothers would be a result of the low welfare payments which they receive and also the lower wages which women who have not completed high school or university generally receive in comparison to men.

There were no differences between the control and unwed mothers in terms of socio-economic status. Both groups were in Hollingshead's fifth socio-economic status level which roughly corresponds to the lower class. The family of origin of the unwed mothers and control group was in Hollingshead's fourth socio-economic status level as measured by the education and occupation of the father. In contrast, the adoptive mothers belonged to Hollingshead's third socio-economic status level which roughly corresponds to the middle class and they came from families of origin in the fourth socio-economic status level as measured by the education and occupation of the father of the family of origin. The obvious socio-economic status differences between both the unwed mothers and control group compared with the adoptive group will account for many of the differences in the results because socio-economic status is considered to be a major influence in determining child rearing attitudes (Sears, p. 432-433).

Although the three groups differed on several demographic variables such as the number of children and age of the mother, several of

these variables are of minor importance in determining the nature of the child-rearing attitudes according to the Sears group. Also, it is very difficult to find a control group which exactly matches the characteristics of the unwed mothers.

Descriptive Data on Unwed Mothers

A. Relationship with the Father:

With regards to the contact with the father of the child, 40.9% had a single or casual relationship with the father before the pregnancy occured; 45.4% had a steady dating relationship and 13.6% were engaged to marry the putative father.

It was found that 62.5% of the unwed mothers received little or no non-financial support from the father, 20.8% received moderate or high non-financial support from the father but the relationship is now ended, and 16.7% experienced a highly non-financial supportive relationship with the father which is still existing.

At the present time, 23.8% of the unwed mothers have a hostile relationship with the father of the child, 42.8% feel indifferently towards the father and 28.6% feel moderately or very close with the father.

B. Source of Income and Residence during Pregnancy

It was found that 54.2% of the unwed mothers resided with friends or their family during their pregnancy, 29.2% resided in maternity homes or community residences; 12.5% resided alone and 4.2% resided with the father of the child.

The income sources for the first six months of pregnancy were the following: 41.7% were dependent upon their families or the father of the child; 33.3% were employed; 25.0% were on social allowance and 8.3% had other sources.

The sources of income for the last three months of pregnancy were the following: 62.5% were on social allowance; 16.7% were employed; 16.7% were dependent on their families; 4.2% were supported by the father; and 4.2% had other sources of income.

C. Contacts with Social Service Agencies, Doctors and Counsellors

It was found that 69.6% had one or two contacts with social service agencies; 26.1% had three or more contacts with social service agencies and 4.3% had no contacts with social service agencies.

After confirming the pregnancy, 91.7% of the unwed mothers had regular contact with a doctor and 8.3% of the unwed mothers saw doctors from two to over five times although they did not have regular visits to the doctor.

These statistics indicate that the vast majority (95.7%) of unwed mothers received at least some assistance from social service agencies and that the majority (91.7%) received adequate medical attention during their pregnancies.

If the unwed mother received counselling during pregnancy, 54.5% found the counselling either helpful or very helpful; whereas, 27.3% found the counselling either no help, a hindrance or confusing and 18.2% found the counselling very confusing or a great hindrance. The fact that almost half (45.5%) of the mothers found the counselling either no help or a great hindrance perhaps indicates the tremendous problems which the women were facing and the psychological difficulties which they were experiencing during their pregnancies.

D. Reaction of Family to Pregnancy

During the pregnancy the families reacted in the following ways: 58.3% were supportive or highly supportive; 25.0% were rejecting

or highly rejecting, 8.3% were indifferent and 8.3% did not know that their daughter was even pregnant. The fact that 41.6% of the families were either rejecting, indifferent or kept from knowing of the pregnancy indicates that almost half of the mothers experienced either rejection or a lack of concern and support from their families which may partially account for some of the psychological difficulties accompanying their adjustment to the pregnancy (see "E" below).

The present reaction of the families to the child are the following: 81.8% are either supportive or highly supportive and 18.1% are indifferent. These results indicate that although the initial reaction of the family of origin may be negative or indifferent and the family may be kept from knowing of the pregnancy (in 41.6% of the cases), once the child is born the family eventually adjusts to the new situation and accepts the child.

E. Reaction of Unwed Mother to Pregnancy and Single Parenthood

It was found that 59.1% of the unwed mothers felt that they coped with the pregnancy well or very well; 36.4% felt that they coped with the pregnancy with either some difficulty or great difficulty, and 4.5% felt that they coped with the pregnancy to an average extent.

It was also found that 81.8% of the unwed mothers felt that they are coping with single parenthood either well or very well, 13.6% felt that they were coping to an average extent, and 4.5% felt that they were experiencing some difficulty with single parenthood.

Results of Relating the CPI and PARI Factors to the Factors in the Literature

The correlation matrix of variables for the CPI and PARI, and the unrotated and rotated factor analysis solutions for both the CPI and PARI appear in Appendix F.

A. PARI Factors

The characteristics of the subjects differed between the Zuckerman study and the present study. The cases used in Zuckerman's study of the PARI were mothers of church social groups, mothers of nursery school children and young mothers attending a night extension course. Whereas, the cases in the present study were specifically chosen for their socio-economic status (control group) and unwed motherhood status, along with adoptive mothers.

The variables that were factor analyzed in the Zuckerman study and the present study were identical. In both studies, the following 25 variables were factor analyzed: 23 PARI variables, age and education of the subjects. The five Zuckerman factors were compared with the six extracted from the thesis data.

Table 1

Factor Comparison of PARI Factors: Cosines (Correlations) Among Factor Axes Established By Program Relate

| Thesis Factors | Zuckerman's Factors I | II | III | IV | V |
|---|---|---|---|---|---|
| I | 0.5009 | | | | |
| II | | 0.6465 | | | |
| III | | | 0.6561 | | |
| IV | | | | 0.7148 | |
| VI | | | | | 0.2548 |

From Table 1 it can be seen that the first four factors match reasonably well and the fifth factor does not match as highly. Although the correlation for the fifth factor is low, it is positively correlated and it is generally related since the PARI variable of "Strictness" belongs to the fifth factor of both the Zuckerman and thesis factor analyses. In the present study "Seclusion of Mother" and "Breaking the Will" also load on factor V; whereas, in the Zuckerman factor analysis, only "Strictness" loads on the fifth factor.

Generally, the results of the comparison of the factors for the two studies are sufficiently similar to establish the stability of the factor structure for the PARI data used in the present study since it adequately replicated the factor structure found in the Zuckerman study.

B. CPI Factors

The CPI factors found in the present study were compared using Veldman's Relate Program with those found in a study by Crites (1961). The cases used in the two studies differed in the following ways: in Crite's study, the subjects were members of a junior and sophomore psychology course, whereas in the present study the unwed mothers and control group were of lower socio-economic status and they had not attended university. The variables used in the factor analyses of the two studies were identical, namely the 18 CPI scales.

Table 2

Factor Comparison of CPI Factors: Cosines (Correlations) Among Factor Axes Established by Program Relate

| Crite's Factors | Thesis Factors I | II | III | IV |
|---|---|---|---|---|
| I | 0.9934 | | | |
| II | | 0.9119 | | |
| III | | | 0.8676 | |
| IV | | | | 0.7857 |

From Table 2 it can be seen that all four factors extracted from the thesis CPI data are highly related to those CPI factors found in the Crites study. Consequently, it may be concluded that the factor structure emerging from the present study is consistent with the factor structure that had been previously found for the CPI.

Interpretation of the Factors

Each factor was identified by those variables with factor loadings that were greater than or equal to 0.60, and by those variables that did not also load highly on other factors. The number in parentheses following the name of each factor indicates the percentage of variance accounted for by the factor.

A. PARI Factors

Factor I: Fostering Dependency (13.7)

This factor was comprised of the following PARI scales: 1. Fostering Dependency (0.7796), 2. Excluding Outside Influence (0.6660), 3. Deification (0.6431) and 4. Martyrdom (0.6075). Generally, these variables may be related to an attempt by the mother to make the child very dependent upon her as she excludes outside in-

fluences from the child and as she exaggerates (deifies) the importance of her role in relation to the child. This factor may be named Fostering Dependency.

Factor II: Rejection-Acceptance (10.1)

This factor was made up of the following PARI scales: 1. Irritability (0.8280), 2. Fear of Harming the Baby (0.7415) and 3. Rejection of Homemaking Role (0.6110). This factor was named the Rejection-Acceptance factor in Zuckerman's study and it will be so called in the present study.

Factor III: Social Desirability (8.7)

This factor was comprised of the following three scales: Comradship and Sharing (0.7548), Equalitarianism (0.7368) and 3. Encouraging Verbalization (0.6762). This factor does not generally discriminate between groups since Schaefer and Bell included these three scales in order to make the questionnaire more pleasant for the subjects to answer. The respondents had complained to Schaefer that most of the questionnaire alternatives seemed very negative towards the child and the mothers appeared to themselves to be "bad mothers." Consequently, by including these three scales which were easily answered by the mothers since they represented socially desirable responses, it was possible to attain better subject cooperation in answering the questionnaire. This factor includes the same scales as Zuckerman's Factor C which he termed the Social Desirability Factor. This factor will also be called the Social Desirability Factor in the present study.

Factor IV: Authoritarian-Permissiveness (15.1)

This factor was made up of the following variables: 1. Avoidance of Communication (-0.7467), 2. Acceleration of Development (-0.7201),

3. Suppression of Aggression (-0.7069) and 4. Approval of Activity (-0.6416). This factor corresponds to about one half of the scales included in Zuckerman's Factor A which he named the Authoritarian-Permissiveness factor. This factor will be named the same in this study.

Factor V. Implicit Rejection (10.4)

This factor was comprised of the following PARI scales: 1. Strictness (-0.8385), 2. Breaking the Will (-0.6672) and 3. Seclusion of the Mother (-0.5620). This factor will be called the Implicit Rejection factor because in expressing the attitudes of strictness and breaking of the will, the mother is not acknowledging the individuality of the child, but rather she imposes her own values on the child. Therefore, she is implicitly rejecting the individuality of the child (Horney, 1937).

Factor VI: Marital Strife (12.2)

This factor was made up of the following scales: 1. Marital Strife (0.7217), 2. Inconsiderateness of Husband (0.6233) and 3. Dependency of Mother (0.6028). The unwed mothers in answering the first two scales were asked to answer in terms of what their attitudes were regarding the issues raised by the questions since, obviously, they could not respond in terms of their own marital experiences. This factor will be named the Marital Strife factor.

B. CPI Factors

Factor I: Adjustment by Social Conformity (29.3)

The first factor was comprised of the following CPI scales: 1. Responsibility (0.8177), 2. Self Control (0.8486), 3. Good Impression (0.8436), 4. Socialization (0.7648) and 5. Achievement via Conformity (0.7372). With the exception of Achievement via Con-

formity, these scales correspond to Gough's Class II "Measures of Socialization, Maturity and Responsibility." Mitchell (Mitchell, p. 454) generally found these scales loaded on the first factor of his factor analysis of the CPI and he named this factor "Adjustment by Social Conformity," which will also be the name of this factor for the present study.

Factor II: Social Poise (21.3)

The second factor had high loadings on the following CPI scales: 1. Self Acceptance (0.8857), 2. Sociability (0.8556), 3. Dominance (0.7935) and 4. Capacity for Status (0.6621). All of these scales belong to Gough's Class I "Measures of Poise, Ascendency and Self-Assurance." Mitchell (p. 454) also found these scales loaded significantly on his factor analysis of the CPI and he named the factor "Social Poise," or, alternatively "Extroversion." This factor will be named "Social Poise" in the present study.

Factor III: Capacity for Independent Thought and Action (16.5)

The CPI variables that loaded highly on this factor were the following: 1. Flexibility (-0.8294), 2. Intellectual Efficiency (-0.6448) and 3. Achievement via Independence (-0.6263). Except for Flexibility, these scales correspond to Gough's Class III "Measures of Achievement Potential and Intellectual Efficiency." In Mitchell's factor analysis of the CPI (Mitchell, p. 454), these scales all loaded on his third factor. Mitchell named this factor "Capacity for Independent Thought and Action," which will also be the name for the factor in the present study.

Factor IV: Super Ego Strength (8.3)

Two variables loaded significantly on this factor: 1. Communality

(0.7176) and 2. Femininity (0.7232). Because these scales suggest a serious, responsible conscientious attitude, Mitchell named this factor "Super Ego Strength" which will also be the name for this factor in the present study.

Results of the Analysis of Variance and Discriminant Analysis

Means and standard deviations for the CPI factors, PARI factors and USC variables for the unwed and control groups are set forth in Table 3. These are plotted as mean profiles in Figure II and Figure III.

The one way analysis of variance of the CPI factors resulted in the unweds scoring significantly lower ($p < 0.005$) than the control group on one CPI factor which was "Adjustment by Social Conformity." Consequently, the unwed mothers exhibited significantly less socialization, maturity, self control, responsibility and conformity than the control mothers and the unweds have less ability to create a good impression on others than the control group as measured by the CPI scales comprising the factor of "Adjustment by Social Conformity."

Only two scales or factors from the USC and PARI approached significance when comparing the unweds and controls. The controls had greater mean scores than the unweds on the USC variable of Overt Acceptance ($p < 0.10$) and the unweds scored more highly than the controls on the Implicit Rejection factor of the PARI ($p < 0.10$). These results indicate a tendency for the unweds to overtly accept their children less than the control group and also a tendency for the unwed mothers to implicitly reject their children more than the control group.

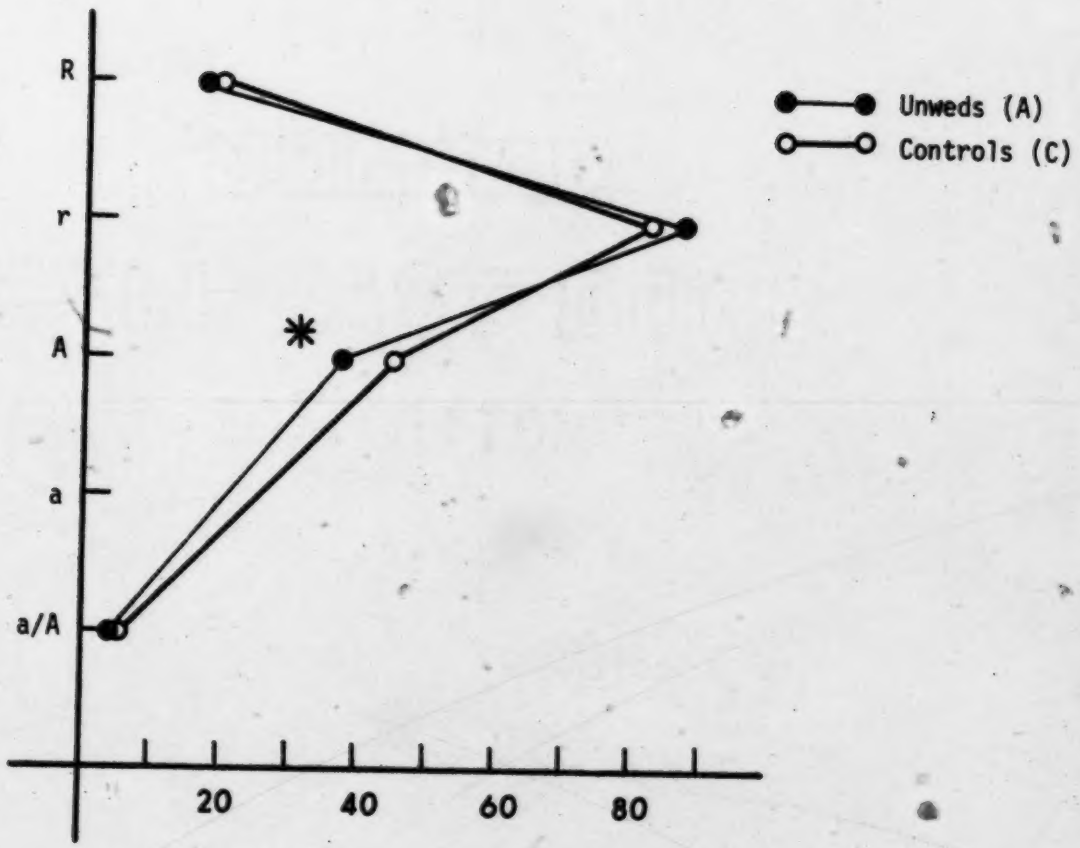
Using all 15 variables and factors of the USC, PARI and CPI, discriminant functions were derived that classified the two groups as

Table 3

Table of Means and Standard Deviations for USC Variables and PARI and CPI Factors on Two Groups, Unweds (Group A) and Controls (Group C)

| Variables and Factors | Group A n = 24 Mean (SD) | Group C n = 22 Mean (SD) | |
|---|---|---|---|
| R | 17.92(4.57) | 19.50(7.22) | A < C |
| r | 87.00(25.27) | 82.18(25.66) | A > C |
| A | 37.79(13.22) | 44.86(13.07) | A < C* |
| a | 30.33(12.55) | 34.23(13.82) | C > A |
| a/A | 4.04(2.60) | 5.73(4.42) | C > A |
| CPI I | -0.41(0.99) | 0.45(0.85) | C > A** |
| CPI II | 0.04(1.16) | -0.04(0.84) | A > C |
| CPI III | 0.02(0.84) | -0.03(1.20) | A > C |
| CPI IV | 0.07(1.00) | -0.08(1.04) | A > C |
| PARI I | 0.17(1.04) | -0.15(0.88) | A > C |
| PARI II | 0.20(0.78) | 0.11(1.26) | A > C |
| PARI III | 0.20(1.28) | -0.13(0.88) | A > C |
| PARI IV | -0.23(1.20) | -0.14(0.93) | C > A |
| PARI V | 0.35(0.90) | -0.16(0.98) | A > C* |
| PARI VI | 0.22(0.93) | 0.16(0.94) | A > C |

$p < .1$*
$p < .005$**




$p < 0.10$* Using Anova

Figure II: Means for the USC Variables Plotted for Two Groups, Unweds and Controls

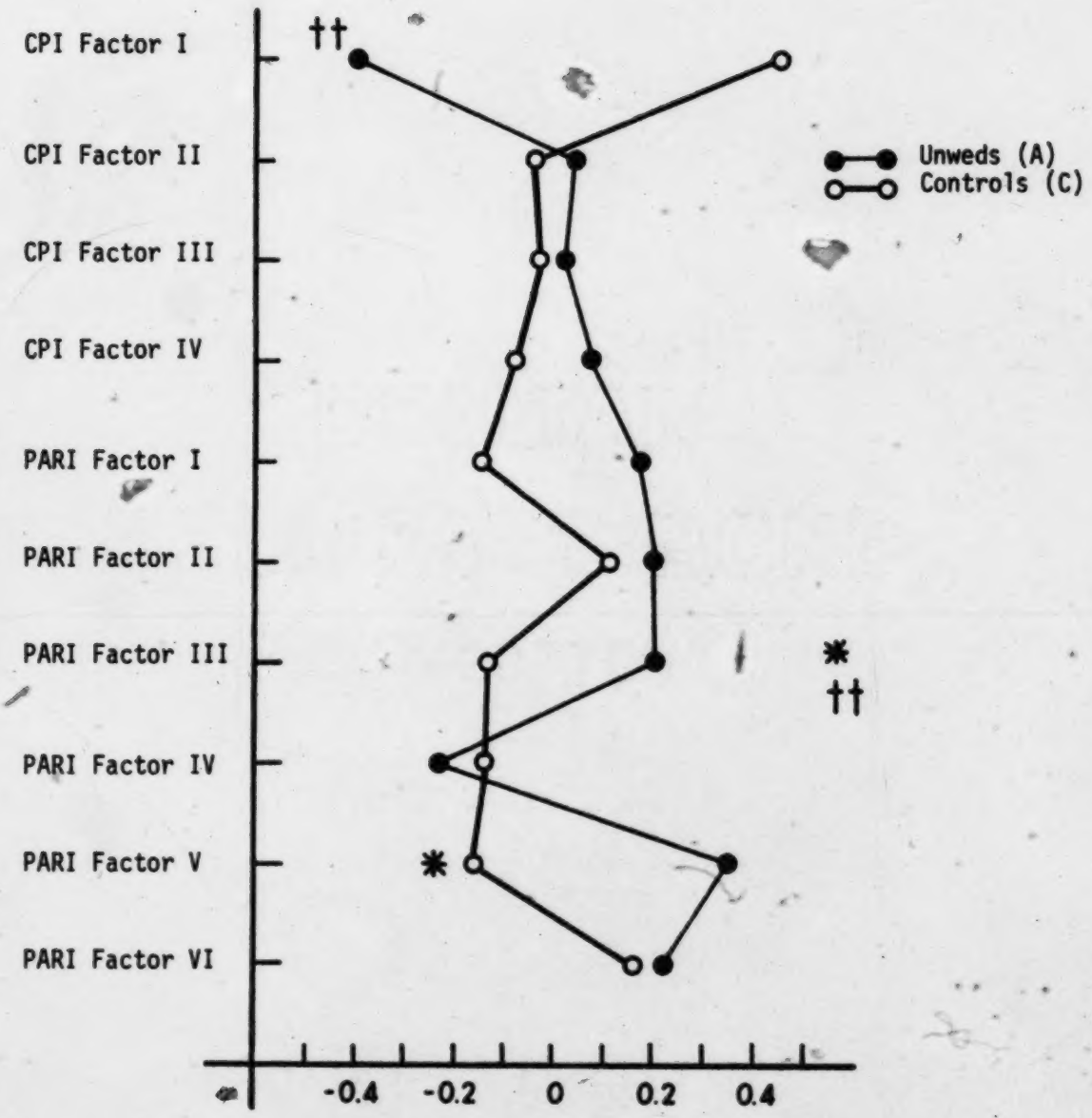



Figure III: Means for the CPI and PARI Factors Plotted for Two Groups, Unweds and Controls

Table 4

Classification of Subjects Into Two Groups, Unweds and Controls

| Number of Cases Classified Into Groups | | | |
|---|---|---|---|
| Group | Unwed | Control | |
| Unwed | 66.67% | 33.33% | n = 24 |
| Control | 22.73% | 77.27% | n = 22 |

Total correctly classified - 71%.

indicated in Table 4. The overall function correctly classified 71% of the Ss and was statistically significant for the following seven factors and variables: 1. "Adjustment by Social Conformity (CPI), 2. Overt Rejection (USC), 3. Social Desireability (PARI), 4. Overt Acceptance (USC), 5. Implicit Rejection (PARI), 6. Authoritarian-Permissive (PARI) and 7. Super Ego Strength (CPI). Of the two classifications, Ss were correctly identified in the unwed group 67% of the time, and in the control group 77% of the time.

Analysis of the PARI factors and USC variables was computed for the three groups. Means and standard deviations are set forth in Table 5 with the mean profiles based on the three groups plotted in Figure IV and Figure V.

To begin with, the comparison of the control group and adoptives on child rearing attitudes using a one way analysis of variance shows that these two groups are very similar since they differ significantly on only one PARI factor of Authoritarian-Permissiveness. The adoptives have significantly more authoritarian attitudes ($p < 0.05$) than the controls. There is also a tendency for the controls to score higher ($p < 0.10$) than the adoptives on the PARI Marital Strife factor.

Because the adoptives and controls have very similar profiles on child-rearing attitudes, it is interesting to note that the unweds, when compared to the adoptives on child rearing attitudes, differed markedly from the adoptives. This difference between the unweds and adoptives, as distinct from the comparison between the controls and adoptives, indicates that the unweds have a constellation of child rearing attitudes which is distinct from that of the controls and adoptives.

Table 5

Table of Means and Standard Deviations for the USC Variables and the PARI Factors on Three Groups, Unweds (Group A), Adoptives (Group B) and Controls (Group C)

| Variables and Factors | Group A n = 24 Mean (SD) | Group B n = 19 Mean (SD) | Group C n = 22 Mean (SD) | | | |
|---|---|---|---|---|---|---|
| R | 17.92(4.57) | 17.32(5.15) | 19.50(7.22) | C > A > B | A > B | C > B |
| r | 87.00(25.27) | 70.95(23.25) | 82.18(25.66) | A > C > B | A > B** | C > B |
| A | 37.79(13.22) | 47.42(12.02) | 44.86(13.07) | B > C > A** | A < B** | C < B |
| a | 30.33(12.55) | 31.37(10.24) | 34.23(13.82) | C > B > A | A < B | C > B |
| a/A | 4.04(2.60) | 5.79(3.55) | 5.73(4.42) | B > C > A | A < B* | C < B |
| PARI I | 0.17(1.04) | -0.04(1.07) | -0.15(0.88) | A > B > C | A > B | C < B |
| PARI II | 0.20(0.78) | -0.38(0.84) | 0.11(1.26) | A > C > B | A > B** | C > B |
| PARI III | 0.20(1.28) | -0.10(0.68) | -0.13(0.88) | A > B > C | A > B | C < B |
| PARI IV | -0.23(1.20) | 0.44(0.80) | -0.14(0.93) | B > C > A** | A < B** | C < B** |
| PARI V | 0.35(0.90) | -0.26(1.12) | -0.16(0.98) | A > C > B | A > B* | C > B |
| PARI VI | 0.22(0.93) | -0.47(1.08) | 0.16(0.94) | A > C > B* | A > B** | C > B* |

p < .1*
p < .05**

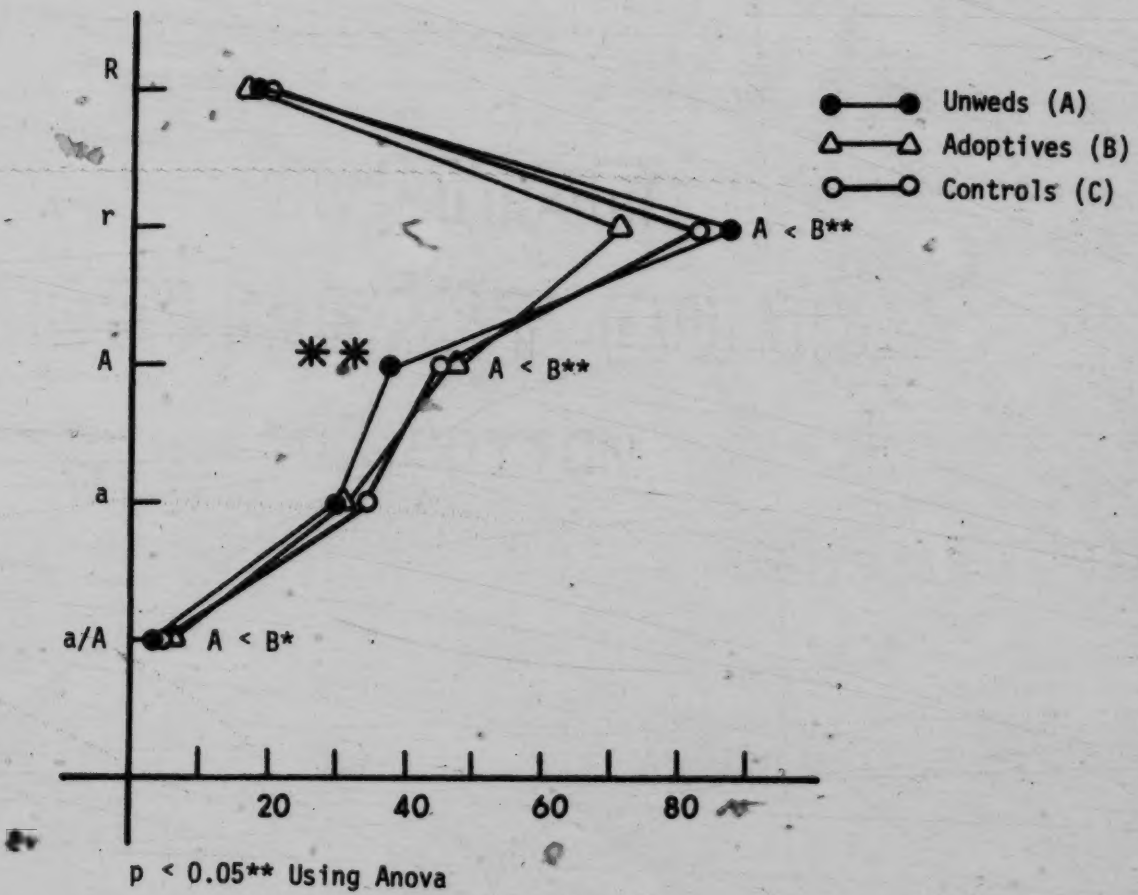



Figure IV: Means for the USC Variables Plotted for Three Groups, Unweds, Controls and Adoptives

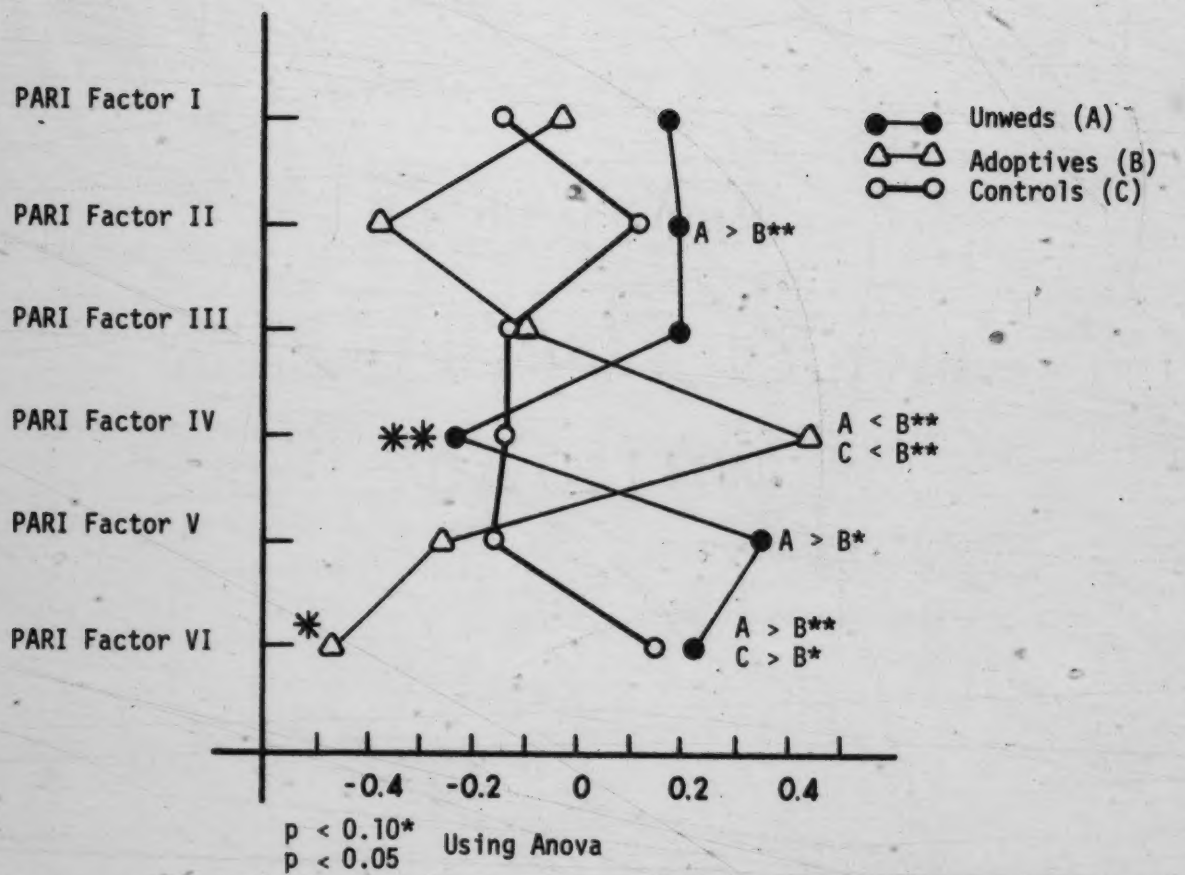



Figure V: Means for the PARI Factor Scores Plotted for Three Groups, Unweds, Controls and Adoptives

The unweds scored significantly higher than the adoptives on the USC variable of Covert Rejection ($p < 0.05$) and the unweds scored significantly lower than the adoptives on the USC variable of Overt Acceptance ($p < 0.05$). The unweds scored significantly higher than the adoptives on the PARI factor of Rejection-Acceptance ($p < 0.05$), thus indicating a more rejecting attitude towards the child on the part of the unwed mother. The unweds also scored significantly less on the PARI factor of Authoritarianism-Permissiveness ($p < 0.05$) indicating that the unweds are more permissive with their children than the adoptives. The unweds also scored significantly higher on the PARI factor of Marital Strife ($p < 0.05$) than the adoptives which is not an important comparison since the unweds were not responding in terms of their experience in marriage, but rather in terms of how they thought that marital partners should interact ideally.

There was a tendency for the unweds to score lower on the USC variable of Covert/Overt Acceptance ($p < 0.10$) than the adoptives and a tendency for the unweds to score more highly on the PARI factor of Implicit Rejection ($p < 0.10$), indicating that the unweds have a tendency to hold an attitude of implicitly rejecting the child more than do the adoptives.

The differences between the child rearing attitude profiles of the unweds and adoptives cannot be explained in terms of socio-economic differences between the two groups because the controls and adoptives also differ with respect to socio-economic status, however their child rearing profiles are similar except for the PARI factor of Authoritarianism-Permissiveness. Consequently, the attitudinal differences between the unweds and adoptives must be explained in terms of other

Table 6

Classification of Subjects Into Three Groups, Unweds, Controls and Adoptives

| Number of Cases Classified Into Groups | | | | |
|---|---|---|---|---|
| Group | Unwed | Control | Adoptive | |
| Unwed | 70.83% | 16.67% | 12.5% | n = 24 |
| Control | 27.27% | 50.00% | 22.73% | n = 22 |
| Adoptive | 5.26% | 5.26% | 89.47% | n = 19 |

Total correctly classified - 69%.

psychological and sociological variables. For example, the adoptives have planned for their child, whereas the unweds have not in most cases. The adoptives have husbands who want the child and support the mother emotionally and financially; whereas, the unweds are generally deserted by the father of the child and the unwed mother is usually left alone to face the financial and emotional burdens of raising a child. Also, the unwed mothers must face the social taboo of illegitimacy and they may see themselves as losing status by becoming unwed mothers; whereas, the adoptive mothers even gain status by adopting children since society admires the humanitarian orientation of parents who adopt children.

Most of the differences in the attitudes of unwed and adoptive mothers centre around a rejecting attitude of the unwed mother and an accepting attitude of the adoptive mother. The above stated psychological and sociological variables help to explain why the unwed mother and adoptive mother tend to have these differing attitudes towards the child.

Using all eleven variables and factors of the USC and PARI, discriminant functions were derived that classified the three groups as indicated in Table 6. The overall function correctly classified 69% of the Ss and was statistically significant for eight of the following factors and variables: 1. Overt Acceptance (USC); 2. Implicit Rejection (PARI); 3. Marital Strife (PARI); 4. Authoritarian-Permissiveness (PARI); 5. Rejection-Acceptance (PARI); 6. Social Desireability (PARI); 7. Covert Acceptance (USC); and 8. Covert Rejection (USC). Of the three classifications, Ss were correctly identified in the unwed group 71% of the time, in the control group

50% of the time and in the adoptive group 89% of the time.

## GENERAL DISCUSSION

Two of the four hypotheses for the study received support.

Hypothesis I. The unwed mothers have more overt and covert rejecting attitudes towards their children than either the married mothers or adoptive mothers.

The data definitely supported this conclusion for the unwed and adoptive mothers. The unweds scored significantly higher on the USC variable of Implicit Rejection ($p < 0.05$) and the unweds scored significantly lower on the USC variable of Overt Acceptance ($p < 0.05$). The unweds also scored significantly higher than the adoptives on rejection of the child on the PARI Acceptance-Rejection factor ($p < 0.05$). There was also a tendency ($p < 0.10$) for the unweds to score higher than the adoptives on the Implicit Rejection factor of the PARI.

There was a tendency for the unweds to have less accepting and more rejecting attitudes towards their children when compared with the controls. The unweds scored less on the USC Overt Acceptance variable ($p < 0.10$) than the controls. Also, the unweds scored more on the PARI factor of Implicit Rejection ($p < 0.10$) than the control mothers.

Hypothesis 2. The unwed mothers have fewer psychological resources or less positive personality profiles as measured by the California Psychological Inventory than the married mothers of comparable socio-economic status.

This hypothesis was basically confirmed by the data. A very strong effect occured on the CPI factor of "Adjustment by Social Conformity" on which the unweds scored significantly lower than the controls ($p < 0.005$). The lower score of the unweds on this factor indicates that the unwed mothers have a distinctive personality profile char-

acterized by a low rating on the following personality attributes: responsibility, self control, capacity to create a good impression, socialization and achievement via conformity.

The lower scores of the unweds on this CPI factor indicate that the unweds have a general lack of maturity or fewer psychological resources than do the control mothers of equal socio-economic status.

The unweds did not score significantly differently from the controls on the other three CPI factors. Consequently, the results of this study were not as conclusive as those of Clark Vincent's study in which the unweds scored significantly lower than the controls on 13 of the 18 CPI scales. The reason for the discrepancy between the results of Vincent's study and the present study may be explained in terms of the fact that the socio-economic status of the unweds and controls was controlled in the present study, whereas socio-economic status was not controlled in Vincent's study. Another reason for the discrepancy may be that in Vincent's study unweds who kept their children were compared with unweds who surrendered their children; whereas, in the present study, unweds who kept their children were compared with married women. However, the results of the present study still tend to confirm Vincent's conclusion that the unweds have basically immature personalities because of the results on the first CPI factor of the present study.

Hypothesis 3. The unwed mothers and married mothers will have authoritarian child-rearing attitudes since they are all of the lower socio-economic status. The adoptives will have more permissive child-rearing attitudes since they are more representative of the middle socio-economic status.

The opposite conclusion to Hypothesis 3 was confirmed by the data. Both the unweds and controls scored significantly lower ($p < .05$) than the adoptives on the PARI factor of Authoritarian-Permissiveness. There is some controversy in the literature as to whether middle class mothers are more authoritarian or more permissive with their children than are lower class mothers. The present study lends some support to the former conclusion.

Hypothesis 4. The married mothers of lower socio-economic status have more rejecting attitudes towards their children than adoptive mothers of middle socio-economic status.

This hypothesis received only partial support from the data. There was a tendency ($p < 0.10$) for the unweds to score lower than the controls on the Overt Acceptance scale of the USC and a tendency ($p < 0.10$) for the unweds to score higher than the controls on the Implicit Rejection factor of the PARI.

The control and adoptive mothers of different socio-economic status did not differ on their attitudes of rejection towards the child. This fact helps to clarify the interpretation of the many significant differences between the unweds and adoptives which indicate that the unweds have rejecting attitudes towards their children. Because the child rearing attitudes of the controls and adoptives did not differ with respect to the acceptance-rejection dimension, the more rejecting attitudes of the unweds, as compared to the adoptives, must be attributed to reasons other than differences in socio-economic status. The major factor on which the unweds and controls differed was the CPI factor of "Adjustment by Social Conformity." This difference between the unweds and controls may be used to explain the rejecting attitudes

of the unweds. Perhaps the lack of psychological resources, maturity, socialization, responsibility and self control (as measured by the CPI factor) of the unweds, coupled with the other psychological and social pressures which the unwed mothers face, combine to create a rejecting attitude towards the illegitimate child on the part of the unwed mother.

Implications

The first major finding of the study was that unwed mothers scored significantly lower than the control mothers on the CPI factor of "Adjustment by Conformity." The implication of this finding is that unwed mothers have significantly fewer psychological resources to bring to the parent-child relationship than do married mothers. This further implies that the illegitimate child is at a distinct disadvantage when compared to the legitimate child on the factor of parental psychological resources.

The second major finding of the study is that the unwed mothers have significantly more rejecting attitudes towards their children than do adoptive mothers. However, in interpreting this finding, it must be noted that the volunteer effect may have resulted in biased findings for the adoptive mothers and not for the unwed mothers; thus partially accounting for the more rejecting attitudes of the unwed mothers in comparison with the adoptive mothers. Also, it should be noted that the unwed mothers of this study were of lower socio-economic status. Consequently, the findings of this study apply to only unwed mothers of lower socio-economic status and not to unwed mothers of middle socio-economic status.

One implication of the second finding of the study is that it might be adviseable, when counselling the pregnant unwed mother, to

inform her of the many problems that she may encounter if she chooses to keep her child and to live as a one parent family. It might be adviseable in inform the unwed mother of the problems experienced by some illegitimate children such as retarded intellectual, emotional and physical growth so that the unwed mother, if she chooses to keep her child, will be guided on how to avoid these problems and she will be making her choice to keep the child fully aware of the possible problems that both she and her child might encounter. The results of the study also imply that the unwed mother should be counselled on the importance of not assuming a rejecting attitude towards her child since a rejecting attitude results in very deleterious effects on the child's personality development.

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# Appendix A

## Appendix A

### The Letter Sent to the Adoptive Mothers (Group B)

March 24, 1974

Dear Madam:

Miss Carol Harvey is currently doing a study on unwanted and illegitimate children under my supervision. Miss Harvey feels that it is very important to determine the extent to which unwanted children are exposed to child rearing practices which are injurious.

You, as an adoptive mother, represent a parent who has planned for her child and who wants her child very much. For this reason, I would appreciate it very much if you could make yourself available for a brief interview on a confidential and voluntary basis. We can have the interview either at your home or in an office at the University with Miss. Harvey who is a Masters student in the Department of Psychology. An appointment can be arranged at a time convenient for you any day up to the end of April.

If you feel that you would like to volunteer information that may be helpful in dealing with the problem of unwanted children, would you please phone my secretary at 432-5330 or write in order to arrange for a personal interview.

Thank you very much for your cooperation.

Sincerely yours,

Paul F. Zelhart, Ph.D.
Associate Professor of Psychology
The University of Alberta

# Appendix B

## Appendix B

### The Letter Sent to the Married Mothers (Group C)

August 23, 1974

Dear Madam:

Miss Carol Harvey is currently doing a study on unwanted and illegitimate children under my supervision. Miss. Harvey feels that it is very important to determine the extent to which unwanted children are exposed to child rearing practices which are injurious.

You, as a married mother, represent a parent who has planned for her child and wants her child. For this reason, I would appreciate it very much if you could make yourself available for a brief interview on a confidential and voluntary basis. We can have the interview either at your home or in an office at the University with Miss Harvey who is a Masters student in the Department of Psychology. An appointment can be arranged at a time convenient for you any day up to the end of September.

If you feel that you would like to volunteer information that may be helpful in dealing with the problem of unwanted children, would you please phone my secretary at 432-5330 or write in order to arrange for a personal interview.

Thank you very much for your cooperation.

Sincerely, yours,

Paul F. Zelhart, Ph.D.
Associate Professor of Psychology
The University of Alberta

Appendix B (cont'd)

Please return to

Mr. R.H. Morrissette
Deputy Director
Public Assistance Branch
Dept. of Health & Social Development
109 St. and 98 Ave.
EDMONTON, Alberta

Please check the relevant box

___ I am not interested in participating in the project.

___

___ I am interested in participating in the project and agree that
___ you can pass my name to Miss Harvey for arrangement for an interview.

NAME _____
(BLOCK LETTERS)

ADDRESS _____

_____

_____

PHONE NO. _____

# Appendix C

## Appendix C

## The PARI Questionnaire

### INVENTORY OF ATTITUDES ON FAMILY LIFE AND CHILDREN

Read each of the statements below and then rate them as follows:

| A | a | d | D |
|---|---|---|---|
| strongly agree | mildly agree | mildly disagree | strongly disagree |

Indicate your opinion by drawing a circle around the "A" if you strongly agree, around the "a" if you mildly agree, around the "d" if you mildly disagree, and around the "D" if you strongly disagree.

There are no right or wrong answers, so answer according to your own opinion. It is very important to the study that all questions be answered. Many of the statements will seem alike but all are necessary to show slight differences of opinion.

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 1. Children should be allowed to disagree with their parents if they feel their own ideas are better. | A | a | d | D |
| 2. A good mother should shelter her child from life's little difficulties. | A | a | d | D |
| 3. The home is the only thing that matters to a good mother. | A | a | d | D |
| 4. Some children are just so bad they must be taught to fear adults for their own good. | A | a | d | D |
| 5. Children should realize how much parents have to give up for them. | A | a | d | D |
| 6. You must always keep tight hold of baby during his bath for in a careless moment he might slip. | A | a | d | D |
| 7. People who think they can get along in marriage without arguments just don't know the facts. | A | a | d | D |
| 8. A child will be grateful later on for strict training. | A | a | d | D |
| 9. Children will get on any woman's nerves if she has to be with them all day. | A | a | d | D |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 10. It's best for the child if he never gets started wondering whether his mother's views are right. | A | a | d | D |
| 11. More parents should teach their children to have unquestioning loyalty to them. | A | a | d | D |
| 12. A child should be taught to avoid fighting no matter what happens. | A | a | d | D |
| 13. One of the worst things about taking care of a home is a woman feels that she can't get out. | A | a | d | D |
| 14. Parents should adjust to the children some rather than always expecting the children to adjust to the parents. | A | a | d | D |
| 15. There are so many things a child has to learn in life there is no excuse for him sitting around with time on his hands. | A | a | d | D |
| 16. If you let children talk about their troubles they end up complaining even more. | A | a | d | D |
| 17. Mothers would do their job better with the children if fathers were more kind. | A | a | d | D |
| 18. A young child should be protected from hearing about sex. | A | a | d | D |
| 19. If a mother doesn't go ahead and make rules for the home the children and husband will get into troubles they don't need to. | A | a | d | D |
| 20. A mother should make it her business to know everything her children are thinking. | A | a | d | D |
| 21. Children would be happier and better behaved if parents would show an interest in their affairs. | A | a | d | D |
| 22. Most children are toilet trained by 15 months of age. | A | a | d | D |
| 23. There is nothing worse for a young mother than being alone while going through her first experience with a baby. | A | a | d | D |
| 24. Children should be encouraged to tell their parents about it whenever they feel family rules are unreasonable. | A | a | d | D |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 25. A mother should do her best to avoid any disappointment for her child. | A | a | d | D |
| 26. The women who want lots of parties seldom make good mothers. | A | a | d | D |
| 27. It is frequently necessary to drive the mischief out of a child before he will behave. | A | a | d | D |
| 28. A mother must expect to give up her own happiness for that of her child. | A | a | d | D |
| 29. All young mothers are afraid of their awkwardness in handling and holding the baby. | A | a | d | D |
| 30. Sometimes it's necessary for a wife to tell off her husband in order to get her rights. | A | a | d | D |
| 31. Strict discipline develops a fine strong character. | A | a | d | D |
| 32. Mothers very often feel that they can't stand their children a moment longer. | A | a | d | D |
| 33. A parent should never be made to look wrong in a child's eyes. | A | a | d | D |
| 34. The child should be taught to revere his parents above all other grown-ups. | A | a | d | D |
| 35. A child should be taught to always come to his parents or teachers rather than fight when he is in trouble. | A | a | d | D |
| 36. Having to be with the children all the time gives a woman the feeling her wings have been clipped. | A | a | d | D |
| 37. Parents must earn the respect of their children by the way they act. | A | a | d | D |
| 38. Children who don't try hard for success will feel they have missed out on things later on. | A | a | d | D |
| 39. Parents who start a child talking about his worries don't realize that sometimes it's better to just leave well enough alone. | A | a | d | D |
| 40. Husbands could do their part if they were less selfish. | A | a | d | D |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 41. It is very important that young boys and girls not be allowed to see each other completely undressed. | A | a | d | D |
| 42. Children and husbands do better when the mother is strong enough to settle most of the problems. | A | a | d | D |
| 43. A child should never keep a secret from his parents. | A | a | d | D |
| 44. Laughing at children's jokes and telling children jokes makes things go more smoothly. | A | a | d | D |
| 45. The sooner a child learns to walk the better he's trained. | A | a | d | D |
| 46. It isn't fair that a woman has to bear just about all the burden of raising children by herself. | A | a | d | D |
| 47. A child has a right to his own point of view and ought to be allowed to express it. | A | a | d | D |
| 48. A child should be protected from jobs which might be too tiring or hard for him. | A | a | d | D |
| 49. A woman has to choose between having a well run home and hobnobbing around with neighbors and friends. | A | a | d | D |
| 50. A wise parent will teach a child early just who is boss. | A | a | d | D |
| 51. Few women get the gratitude they deserve for all they have done for their children. | A | a | d | D |
| 52. Mothers never stop blaming themselves if their babies are injured in accidents. | A | a | d | D |
| 53. No matter how well a married couple love one another, there are always differences which cause irritation and lead to arguments. | A | a | d | D |
| 54. Children who are held to firm rules grow up to be the best adults. | A | a | d | D |
| 55. It's a rare mother who can be sweet and even tempered with her children all day. | A | a | d | D |
| 56. Children should never learn things outside the home which make them doubt their parents' ideas. | A | a | d | D |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 57. A child soon learns that there is no greater wisdom than that of his parents. | A | a | d | D |
| 58. There is no good excuse for a child hitting another child. | A | a | d | D |
| 59. Most young mothers are bothered more by the feeling of being shut up in the home than by anything else. | A | a | d | D |
| 60. Children are too often asked to do all the compromising and adjustment and that is not fair. | A | a | d | D |
| 61. Parents should teach their children that the way to get ahead is to keep busy and not waste time. | A | a | d | D |
| 62. Children pester you with all their little upsets if you aren't careful from the first. | A | a | d | D |
| 63. When a mother doesn't do a good job with children it's probably because the father doesn't do his part around the home. | A | a | d | D |
| 64. Children who take part in sex play become sex criminals when they grow up. | A | a | d | D |
| 65. A mother has to do the planning because she is the one who knows what's going on in the home. | A | a | d | D |
| 66. An alert parent should try to learn all her child's thoughts. | A | a | d | D |
| 67. Parents who are interested in hearing about their children's parties, dates and fun help them grow up right. | A | a | d | D |
| 68. The earlier a child is weaned from its emotional ties to its parents the better it will handle its own problems. | A | a | d | D |
| 69. A wise woman will do anything to avoid being by herself before and after a new baby. | A | a | d | D |
| 70. A child's ideas should be seriously considered in making family decisions. | A | a | d | D |
| 71. Parents should know better than to allow their children to be exposed to difficult situations. | A | a | d | D |
| 72. Too many women forget that a mother's place is in the home. | A | a | d | D |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 73. Children need some of the natural meanness taken out of them. | A | a | d | D |
| 74. Children should be more considerate of their mothers since their mothers suffer so much for them. | A | a | d | D |
| 75. Most mothers are fearful that they may hurt their babies in handling them. | A | a | d | D |
| 76. There are some things which just can't be settled by a mild discussion. | A | a | d | D |
| 77. Most children should have more discipline than they get. | A | a | d | D |
| 78. Raising children is a nerve-wracking job. | A | a | d | D |
| 79. The child should not question the thinking of his parents. | A | a | d | D |
| 80. Parents deserve the highest esteem and regard of their children. | A | a | d | D |
| 81. Children should not be encouraged to box or wrestle because it often leads to trouble or injury. | A | a | d | D |
| 82. One of the bad things about raising children is that you aren't free enough of the time to do just as you like. | A | a | d | D |
| 83. As much as is reasonable a parent should try to treat a child as an equal. | A | a | d | D |
| 84. A child who is "on the go" all the time will most likely be happy. | A | a | d | D |
| 85. If a child has upset feelings it is best to leave him alone and not make it look serious. | A | a | d | D |
| 86. If mothers could get their wishes they would most often ask that their husband be more understanding. | A | a | d | D |
| 87. Sex is one of the greatest problems to be contended with in children. | A | a | d | D |
| 88. The whole family does fine if the mother puts her shoulders to the wheel and takes charge of things. | A | a | d | D |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| 89. A mother has a right to know everything going on in her child's life because her child is part of her. | A | a | d | D |
| 90. If parents would have fun with their children, the children would be more apt to take their advice. | A | a | d | D |
| 91. A mother should make an effort to get her child toilet trained at the earliest possible time. | A | a | d | D |
| 92. Most women need more time than they are given to rest up in the home after going through childbirth. | A | a | d | D |
| 93. When a child is in trouble he ought to know he won't be punished for talking about it with his parents. | A | a | d | D |
| 94. Children should be kept away from all hard jobs which might be discouraging. | A | a | d | D |
| 95. A good mother will find enough social life within the family. | A | a | d | D |
| 96. It is sometimes necessary for the parents to break the child's will. | A | a | d | D |
| 97. Mothers sacrifice almost all their own fun for their children. | A | a | d | D |
| 98. A mother's greatest fear is that in a forgetful moment she might let something bad happen to the baby. | A | a | d | D |
| 99. It's natural to have quarrels when two people who both have minds of their own get married. | A | a | d | D |
| 100. Children are actually happier under strict training. | A | a | d | D |
| 101. It's natural for a mother to "blow her top" when children are selfish and demanding. | A | a | d | D |
| 102. There is nothing worse than letting a child hear criticisms of his mother. | A | a | d | D |
| 103. Loyalty to parents comes before anything else. | A | a | d | D |
| 104. Most parents prefer a quiet child to a "scrappy" one. | A | a | d | D |
| 105. A young mother feels "held down" because there are | | | | |

Appendix C (cont'd)

| | Agree | | Dis-agree | |
|---|---|---|---|---|
| lots of things she wants to do while she is young. | A | a | d | D |
| 106. There is no reason parents should have their own way all the time, any more than that children should have their own way all the time. | A | a | d | D |
| 107. The sooner a child learns that a wasted minute is lost forever the better off he will be. | A | a | d | D |
| 108. The trouble with giving attention to children's problems is they usually just make up a lot of stories to keep you interested. | A | a | d | D |
| 109. Few men realize that a mother needs some fun in life too. | A | a | d | D |
| 110. There is usually something wrong with a child who asks a lot of questions about sex. | A | a | d | D |
| 111. A married woman knows that she will have to take the lead in family matters. | A | a | d | D |
| 112. It is a mother's duty to make sure she knows her child's innermost thoughts. | A | a | d | D |
| 113. When you do things together, children feel close to you and can talk easier. | A | a | d | D |
| 114. A child should be weaned away from the bottle or breast as soon as possible. | A | a | d | D |
| 115. Taking care of a small baby is something that no woman should be expected to do all by herself. | A | a | d | D |

Appendix C (cont'd)

The PARI Score Sheet with the Code for Scoring the Responses

SCORE SHEET FOR SAMPLE

23 SCALE 5-ITEM QUESTIONNAIRE (FINAL FORM IV)

NAME: _____ DATE: _____ NUMBER: _____

PARENTAL ATTITUDE RESEARCH INSTRUMENT

| 1 | 24 | 47 | 70 | 93 | Scale Score | Sub-Test Title |
|---|---|---|---|---|---|---|
| 2 | | | | | | Encouraging Verbalization |
| 3 | | | | | | Fostering Dependency |
| 4 | | | | | | Seclusion of the Mother |
| 5 | | | | | | Breaking the Will |
| 6 | | | | | | Martyrdom |
| 7 | | | | | | Fear of Harming the Baby |
| 8 | | | | | | Marital Conflict |
| 9 | | | | | | Strictness |
| 10 | | | | | | Irritability |
| 11 | | | | | | Excluding Outside Influences |
| 12 | | | | | | Deification |
| 13 | | | | | | Suppression of Aggression |
| 14 | | | | | | Rejection of the Homemaking Role |
| 15 | | | | | | Equalitarianism |
| 16 | | | | | | Approval of Activity |
| 17 | | | | | | Avoidance of Communication |
| 18 | | | | | | Inconsiderateness of the Husband |
| 19 | | | | | | Suppression of Sexuality |
| 20 | | | | | | Ascendancy of the Mother |
| 21 | | | | | | Intrusiveness |
| 22 | | | | | | Comradeship and Sharing |
| 23 | | | | | | Acceleration of Development |
| | | | | | | Dependency of the Mother |

Instructions: Enter the number 4, 3, 2 or 1 in each square according to whether the response was Strong Agreement, Mild Agreement, Mild Disagreement, or Strong Disagreement respectively. Thus, if the subject responded with Mild Disagreement to item #25, a 2 would be entered in the second cell of the second row. Total score is merely the sum of entries across rows. Since items are arranged in a cyclical order by scales all items in a given row belong to the same scale. Hence, summing across gives the score for that scale.

# Appendix D

## Appendix D

## THE U.S.C. MATERNAL ATTITUDE SCALE

Please answer the following questions in terms of your degree of agreement or disagreement with the statement. For those questions that you strongly agree with, circle the "A"; for those questions that you strongly disagree with, circle the "D." Circle the letters indicating less strong agreement or disagreement with the statement by circling the smaller "a's" and "d's."

| | Strongly Disagree | Disagree | Slightly Disagree | Slightly Agree | Agree | Strongly Agree |
|---|---|---|---|---|---|---|
| 1. I'd prefer not to have any more children. | D | d | d | a | a | A |
| 2. I believe parents need to have holidays from children. | D | d | d | a | a | A |
| 3. Children should be told to say, "I love you." | D | d | d | a | a | A |
| 4. I should listen to my child whether interested in what he's saying or not. | D | d | d | a | a | A |
| 5. I feel better when I buy my child a gift. | D | d | d | a | a | A |
| 6. A child should be made to feel what he should do without my having to order him to do it. | D | d | d | a | a | A |
| 7. I should always act as if I love my child even if I don't. | D | d | d | a | a | A |
| 8. I try not to express anger with my child openly. | D | d | d | a | a | A |
| 9. I always try to do what's best for the child's sake whether he likes it or not. | D | d | d | a | a | A |
| 10. A mother should sacrifice her own desires for what is best for her children. | D | d | d | a | a | A |
| 11. A mother should help her children even if they don't request help. | D | d | d | a | a | A |
| 12. A child should be a good reflection on his parents. | D | d | d | a | a | A |
| 13. I feel it is my duty to show my child that what I want is for his sake. | D | d | d | a | a | A |

Appendix D (cont'd)

| | | | | | | |
|---|---|---|---|---|---|---|
| 14. Any parent should be proud to have a child who is almost always well-mannered. | D | d | d | a | a | A |
| 15. Any parent should be proud to have a child who keeps himself neat and clean. | D | d | d | a | a | A |
| 16. Any parent should be proud to have a child who hardly ever is noisy and quarrelsome at home. | D | d | d | a | a | A |
| 17. Any parent should be proud to have a child who does what he is told most of the time. | D | d | d | a | a | A |
| 18. Any parent should be proud to have a child who has rarely shown any sexual curiosity. | D | d | d | a | a | A |
| 19. Any parent should be proud to have a child who was toilet-trained early. | D | d | d | a | a | A |
| 20. Any parent should be proud to have a child who rarely cries. | D | d | d | a | a | A |
| 21. Any parent should be proud to have a child who is weaned early from the bottle. | D | d | d | a | a | A |
| 22. Self-control and self-sacrifice are two of the most desireable traits of a good mother. | D | d | d | a | a | A |
| 23. A baby can be spoiled if he is picked up whenever he cries. | D | d | d | a | a | A |
| 24. A child will be spoiled if he gets his own way too much when he is small. | D | d | d | a | a | A |
| 25. A mother should stop nursing her baby if her doctor tells her he is big enough for a bottle. | D | d | d | a | a | A |
| 26. I find my child exceptionally attractive. | D | d | d | a | a | A |
| 27. A mother should be proud to have a baby who is weaned early from the breast. | D | d | d | a | a | A |
| 28. It's quite normal for a mother to be relieved when her children start school. | D | d | d | a | a | A |
| 29. Children restrict the social activities I would like to have. | D | d | d | a | a | A |
| 30. Children should learn not to upset a neatly kept house. | D | d | d | a | a | A |
| 31. It is better for a child to learn to leave things alone than to have to put things out of his reach. | D | d | d | a | a | A |

Appendix D (cont'd)

32. Playing with children should wait until the housework is done. D d d a a A

33. It is better for a mother to hold in her anger when upset by her child's conduct. D d d a a A

34. A mother should intervene in children's quarrels if there is a possibility that one might be hurt. D d d a a A

35. The older child should be held responsible in his play with younger children. D d d a a A

36. A baby should never be neglected, even if it makes the older child resentful. D d d a a A

37. A mother should encourage her child to follow the example of another child's good behavior. D d d a a A

38. It disturbs me when my child is not superior to other children. D d d a a A

39. I rarely forgot the feeding hour. D d d a a A

40. I more often punish the child by confinement to his room than by spanking. D d d a a A

41. I more often punish by removal of privileges than by spanking. D d d a a A

42. Much delinquent behavior could be eliminated if parents taught their children control by stronger disciplinary measures. D d d a a A

43. The alarming growth in juvenile delinquency may be attributed in part to lax methods of discipline. D d d a a A

44. Most juvenile delinquency could be avoided if young people were kept busy. D d d a a A

45. I have often wished that I were single again. D d d a a A

46. Parents can control children by giving them gifts for good behavior. D d d a a A

47. If a child is warned enough about bad behavior, he may not have to be punished so much. D d d a a A

48. Turning over discipline to my spouse is often more effective than handling it myself. D d d a a A

49. Deliberate disobedience should be punished severly, especially if it might lead to endangering the child's health. D d d a a A

Appendix D (cont'd)

| | | | | | | |
|---|---|---|---|---|---|---|
| 50. | A good scolding seems to work better with my children than spanking. | D | d | d | a | a A |
| 51. | I often have to "keep after" my child to get him to do things. | D | d | d | a | a A |
| 52. | The reason more "gifted" children are from upper-class families is that these families have higher standards. | D | d | d | a | a A |
| 53. | It is impossible to "spoil" a baby by too much indulgence. | D | d | d | a | a A |
| 54. | I am unconcerned when my child makes a mess around the house. | D | d | d | a | a A |
| 55. | Neatness and orderliness are taught by early training. | D | d | d | a | a A |
| 56. | There are many occasions when children should be seen and not heard. | D | d | d | a | a A |
| 57. | A good way to increase a child's motivation to do better in school is to offer him a prize for improved grades. | D | d | d | a | a A |
| 58. | I would be satisfied if my child made "D" grades at school. | D | d | d | a | a A |
| 59. | I should hear my child just as soon as he starts to cry at night even if I am asleep. | D | d | d | a | a A |
| 60. | I pay little attention to my child's expression of "mean" or hostile feelings. | D | d | d | a | a A |
| 61. | I would like to have a trustworthy baby sitter two or three times a week. | D | d | d | a | a A |
| 62. | I don't like children to play together if they don't get along with each other. | D | d | d | a | a A |
| 63. | Parents should lavish their children with praise for their achievements at school. | D | d | d | a | a A |
| 64. | My child is generally capable of making decisions for himself. | D | d | d | a | a A |
| 65. | A child should be given music, dancing, or swimming lessons, even if he is not interested. | D | d | d | a | a A |
| 66. | A parent should feel responsible for seeing his child do his homework. | D | d | d | a | a A |

Appendix D (cont'd)

| | | | | |
|---|---|---|---|---|
| 67. A parent should expect his child to behave better in public than at home. | D | d d | a a | A |
| 68. I frequently try to help my child by correcting his mistakes. | D | d d | a a | A |
| 69. I don't like my child to eat dirt or grass. | D | d d | a a | A |
| 70. I like to hold my child whether he is dirty or clean. | D | d d | a a | A |
| 71. I am apt to be impatient if my child interrupts me when I'm speaking to adults. | D | d d | a a | A |
| 72. I spank my child when he is disobedient. | D | d d | a a | A |
| 73. I always permit my child to have a light burning or his door open at night if he wants it. | D | d d | a a | A |
| 74. I do not permit my child to climb tall trees. | D | d d | a a | A |
| 75. I try to discourage my child from playing in mud and dirt. | D | d d | a a | A |
| 76. I punish temper tantrums firmly and promptly. | D | d d | a a | A |
| 77. It is easy for me to tell my child that I love him. | D | d d | a a | A |
| 78. I feel that some of my child's friends are a bad influence on him. | D | d d | a a | A |
| 79. I generally insist that my child eat what I believe to be best for him. | D | d d | a a | A |
| 80. I dislike changing my child's dirty diapers. | D | d d | a a | A |
| 81. A child should be disciplined when he soils his pants after he starts toilet training. | D | d d | a a | A |
| 82. Parents should be disturbed if their child fails to progress at the rate they know he should. | D | d d | a a | A |
| 83. Children should be allowed to fight freely with their brothers and sisters. | D | d d | a a | A |
| 84. I do not allow my child to say, "I hate you." | D | d d | a a | A |
| 85. I allow my child to eat pretty much what he wants. | D | d d | a a | A |
| 86. If my child sucked his thumb, I would try to discourage him by some form of discipline. | D | d d | a a | A |

Appendix D (cont'd)

87. Children should be permitted to talk whenever they wish. D d d a a A

88. It is better to let a baby cry it out than to pick him up every time he cries if there seems to be nothing wrong with him. D d d a a A

89. I am greatly annoyed when my child whines or cries for long periods. D d d a a A

90. I don't let my child use crying as a device to get out of a bad situation. D d d a a A

91. I meet my child's demands for attention with firm but moderate discipline. D d d a a A

92. Mothers should feel free to work outside the home if they can find a good baby sitter for their children. D d d a a A

Appendix D (cont'd)

The Code for Scoring the USC Responses

THE USC MATERNAL ATTITUDE SURVEY

| Item | Judges' Ratings Agree | Disagree | Item | Judges' Ratings Agree | Disagree |
|---|---|---|---|---|---|
| 1 | R | a | 42 | r | a |
| 2 | r | a | 43 | r | a |
| 3 | r | a | 44 | r | a |
| 4 | r | R | 45 | r | a/A |
| 5 | r | R | 46 | r | a |
| 6 | r | a | 47 | r | R |
| 7 | r | R | 48 | r | R |
| 8 | r | R | 49 | r | a |
| 9 | r | a/A | 50 | r | R |
| 10 | r | R | 51 | r | A |
| 11 | r | a | 52 | r | a |
| 12 | r | a | 53 | a | r |
| 13 | r | a | 54 | A | r |
| 14 | r | a | 55 | r | a |
| 15 | r | a | 56 | r | a |
| 16 | r | A | 57 | r | a |
| 17 | r | a/A | 58 | A | r |
| 18 | r | A | 59 | r | r/a |
| 19 | r | A | 60 | a | R |
| 20 | r | a | 61 | r | A |
| 21 | r | a/A | 62 | r | a/A |
| 22 | r | A | 63 | r | a |
| 23 | r | A | 64 | a | r |
| 24 | r | A | 65 | r | a |
| 25 | r | A | 66 | r | a |
| 26 | A | R | 67 | r | A |
| 27 | r | a | 68 | r | a |
| 28 | r | A | 69 | r | a |
| 29 | r | A | 70 | A | R |
| 30 | r | A | 71 | R | A |
| 31 | r | a | 72 | R | a |
| 32 | r | A | 73 | A | r |
| 33 | r | R | 74 | r | a |
| 34 | A | R | 75 | r | a |
| 35 | r | a | 76 | R | A |
| 36 | r | a | 77 | A | r |
| 37 | r | a/A | 78 | r | a |
| 38 | r | A | 79 | r | a/A |
| 39 | A | r | 80 | r | A |
| 40 | r | R | 81 | R | A |
| 41 | r | R | 82 | R | a |

Appendix D (cont'd)

| Item | Judges' Ratings Agree | Disagree | Item | Judges' Ratings Agree | Disagree |
|---|---|---|---|---|---|
| 83 | a | r | 88 | r | A |
| 84 | r | A | 89 | r | A |
| 85 | A | r | 90 | R | A |
| 86 | r | A | 91 | r | a |
| 87 | A | r | 92 | r | A |

R - overt rejection
r - covert rejection
A - overt acceptance
a - covert acceptance
a/A - undifferentiated acceptance

# Appendix E

## Appendix E

## QUESTIONNAIRE

The following questionnaire and tests are part of a research project being carried out by MOVE, a charitable society working for unwed mothers and a graduate student from the University of Alberta. This research will aid us in getting a better understanding of unwed mothers and help us and we hope the community at large to provide services which best meet their needs. To insure your privacy in this matter we shall not ask your name. We would like to thank you for your cooperation and time in assisting us in our efforts.

INSTRUCTIONS

1. Please read the following questions carefully.
2. Answer only those items which apply to you.
3. On the items which do not apply please place the letters NA above the check spaces for the choices or in the answer blank.
4. On the questions that apply to you please check in the space next to the most accurate choice or fill in the blank as indicated by the question.

---

| | | |
|---|---|---|
| 1. Your age | a) less than 16 | |
| | b) 17 or 18 | ___ |
| | c) 19 or 20 | ___ |
| | d) 21 to 25 | ___ |
| | e) 26 to 30 | ___ |
| | f) over 30 | ___ |
| | | ___ |
| 2. Marital status | a) single | |
| | b) married | ___ |
| | c) common-law marriage | ___ |
| | d) separated/divorced | ___ |
| | | ___ |
| 3. Disposition of child | a) kept child | |
| | b) surrendered child | ___ |
| | c) placed child with relatives | ___ |
| | d) placed child with non-relatives | ___ |
| | e) two of above or other (specify) | ___ |
| | | ___ |
| 4. Children | a) one male child | |
| | b) one female child | ___ |
| | c) one male/one female | ___ |
| | d) two male children | ___ |
| | e) two female children | ___ |
| | f) more than two children | ___ |
| | g) if twins please check here | ___ |

Appendix E (cont'd)

| | | 1st | 2nd | 3rd |
|---|---|---|---|---|
| 5. Children's ages | a) less than one year | — | — | — |
| | b) 1 or 2 years old | — | — | — |
| | c) 3, 4, or 5 years old | — | — | — |
| | d) 6 to 10 years old | — | — | — |
| 6. Your education level | a) did not complete junior high | — | | |
| | b) completed junior high | — | | |
| | c) completed senior high | — | | |
| | d) completed trade/technical course | — | | |
| | e) obtained college degree | — | | |
| 7. Source of income | a) are dependent on parent/spouse | — | | |
| | b) employment | — | | |
| | c) support from spouse/child's father | — | | |
| | d) social allowance (welfare) | — | | |
| | e) Manpower/provincial training agent | — | | |
| | f) other (please specify) | — | | |
| | _____ | | | |
| 8. Occupation (if employed) (see categories on this page) | a) professional/managerial | | | |
| | b) clerical | — | | |
| | c) sales and service | — | | |
| | d) production, transportation, or construction | — | | |
| | e) student/trainee | — | | |
| | f) other (please specify) | — | | |
| | _____ | | | |
| 9. Monthly income (if employed or of spouse if married or in common-law union) | a) under $300.00/month | | | |
| | b) $300 to $400/month | — | | |
| | c) $400 to $500/month | — | | |
| | d) $500 to $600/month | — | | |
| | e) over $600.00/month | — | | |
| 10. Residence | a) with parents | | | |
| | b) with spouse | — | | |
| | c) living alone | — | | |
| | d) with friends or relatives | — | | |
| | e) with male in common-law union | — | | |
| | f) other (please specify) | — | | |
| | _____ | | | |
| 11. Religion | a) Jewish | | | |
| | b) Protestant | — | | |
| | c) Roman Catholic | — | | |
| | d) other (please specify) | — | | |
| | _____ | | | |

Appendix E (cont'd)

Examples of different types of occupation to be used in questions 8 and 18.

Professional and Managerial

physicians, dentists, nurses, lawyers, engineers, social welfare workers, teachers, librarians, dietitions, laboratory technicians, draughtsmen, government officials, credit managers, sales managers, office managers, people in business on own account.

Clerical

secretaries, bookkeepers and cashiers, stenographers, typists, receptionists, office appliance operators.

Sales and Service

sales clerks, salesmen, hairdressers, waitresses, nursing aides, social aides, cooks, homemakers/homehelp, babysitters, telephone operators, ushers, elevator tenders, janitors, service station attendants, firemen, policemen, postmen, armed forces.

Production, Construction and Transportation

machinists, mechanics, machine operators, dressmakers, seamstresses, printing workers, carpenters, plumbers, electricians, locomotive engineers/firemen/conductors, bus drivers, taxi drivers, truck drivers.

12. Church attendance
- a) regularly ___
- b) occasionally ___
- c) rarely ___
- d) never ___

13. I have lived in Edmonton _____ years.

14. I have lived in Alberta _____ years.

15. I have lived in Canada _____ years.

---

INFORMATION ON FAMILY AND RELATIONSHIPS

16. Home situation
- a) both parents alive/living together ___
- b) home broken by death and you lived with
  - i) mother ___
  - ii) father ___
  - iii) relatives ___
- c) home broken by divorce or separation and you lived with

Appendix E (cont'd)

i) mother ___
ii) father ___
iii) relatives ___

17. If home broken did parent with whom you lived remarry? yes ___ no ___

18. Father's occupation
a) professional/managerial ___
b) clerical ___
c) sales and service ___
d) production, transportation or construction ___
e) other (please specify) ___

19. Father's monthly income
a) under $300.00/month ___
b) $300 to $400/month ___
c) $400 to $500/month ___
d) $600 to $800/month ___
e) over $800.00/month ___

20. Father's education
a) did not complete junior high ___
b) completed junior high ___
c) completed senior high ___
d) completed trade/technical course ___
e) obtained college degree ___

21. Mother's education
a) did not complete junior high ___
b) completed junior high ___
c) completed senior high ___
d) completed trade/technical course ___
e) obtained college degree ___

22. Parent's religion
a) Jewish ___
b) Protestant ___
c) Roman Catholic ___
d) other (please specify) ___

23. Church attendance
a) regularly ___
b) occasionally ___
c) rarely ___
d) never

24. Estimate of parent's marriage
a) very happy ___
b) happy ___
c) average ___
d) unhappy ___
e) very unhappy ___

Appendix E (cont'd)

25. Who made most of the important decisions in the family?

a) no one in particular ___
b) father ___
c) mother ___
d) someone else (please specify) ___

_____

26. How would you describe the interaction between your father and mother in the home?

a) father definitely dominant ___
b) father tended to be dominant ___
c) it was about 50/50 ___
d) mother tended to be dominant ___
e) mother definitely dominant ___

27. Which of the following best describes the way you were disciplined?

| | up to 13? | after 13? |
|---|---|---|
| a) father 0% - mother 100% | ___ | ___ |
| b) father 25% - mother 75% | ___ | ___ |
| c) father 50% - mother 50% | ___ | ___ |
| d) father 75% - mother 25% | ___ | ___ |
| e) father 100% - mother 0% | ___ | ___ |

28. What was your relationship with your parents up to the age of 15?

| | mother | father |
|---|---|---|
| a) very close | ___ | ___ |
| b) close | ___ | ___ |
| c) somewhat close | ___ | ___ |
| d) not close | ___ | ___ |
| e) distant | ___ | ___ |
| f) I don't remember | ___ | ___ |

29. What is your relationship with your parents at the present time?

| | mother | father |
|---|---|---|
| a) very close | ___ | ___ |
| b) close | ___ | ___ |
| c) somewhat close | ___ | ___ |
| d) not close | ___ | ___ |
| e) distant | ___ | ___ |
| f) other circumstances--no contact | ___ | ___ |

30. Of all the people you have known, who do you think most favorably impressed you?

| | up to 15? | after 15? |
|---|---|---|
| a) mother | ___ | ___ |
| b) father | ___ | ___ |
| c) brother and sister | ___ | ___ |
| d) teacher | ___ | ___ |
| e) friend of same sex | ___ | ___ |
| f) friend of opposite sex | ___ | ___ |
| g) other (please specify) | ___ | ___ |

_____

Appendix E (cont'd)

DATING AND MISCELLANEOUS INFORMATION

31. How old were you when you had your first date? ___

32. How much difficulty did you have in early adolescence in making friends with the opposite sex?

a) very great difficulty ___
b) great difficulty ___
c) average difficulty ___
d) little difficulty ___
e) very little difficulty ___

33. What was and is your evaluation of your physical appearance?

| | In adolescence? | Now? |
|---|---|---|
| a) unusually good looking | ___ | ___ |
| b) above average looks | ___ | ___ |
| c) average looks | ___ | ___ |
| d) below average looks | ___ | ___ |
| e) homely | ___ | ___ |

34. What was and is your evaluation of your personality or personal attractiveness?

| | In adolescence? | Now? |
|---|---|---|
| a) superior | ___ | ___ |
| b) above average | ___ | ___ |
| c) average | ___ | ___ |
| d) below average | ___ | ___ |
| e) poor | ___ | ___ |

35. How confident are you at present in associating with the opposite sex?

a) very confident ___
b) confident ___
c) little confidence ___
d) no confidence at all ___

36. Do you ever have doubts about your chances of having a successful marriage?

a) frequently ___
b) occasionally ___
c) rarely ___
d) never ___

37. Do you, or did you, prefer to "go steady" or date the field?

a) go steady ___
b) date the field ___

38. How many different people did you date?

| | In Junior High | In Senior High | In College |
|---|---|---|---|
| a) none | ___ | ___ | ___ |
| b) 1 | ___ | ___ | ___ |

Appendix E (cont'd)

| | | | |
|---|---|---|---|
| c) 2 or 3 | — | — | — |
| d) 4 or 5 | — | — | — |
| e) 6 or 7 | — | — | — |
| f) 8 or 9 | — | — | — |
| g) 10 to 15 | — | — | — |
| h) 15 to 20 | — | — | — |
| i) over 20 | — | — | — |

39. Your school average was approximately. . .

a) 80% to 100% —
b) 65% to 80% —
c) 50% to 65% —
d) 40% to 50% —
e) less than 40% —

40. Before you were 15 did you live most of your time. . .

a) in city over 500,000 —
b) 100,000 to 500,000 —
c) 10,000 to 100,000 —
d) 2,500 to 10,000 —
e) village under 2,500 —
f) open country, non-farm —
g) on a farm —

41. Before you were 15 where did you get most of your information about sex?

a) mother —
b) father —
c) brothers and sisters —
d) friend, same sex —
e) friend, opposite sex —
f) school classes —
g) reading —
h) parent of friend —
i) had no information —

42. At what age did you first have sexual intercourse?

a) before 15 —
b) 16 - 18 —
c) 19 - 21 —
d) 22 - 25 —
e) after 25 —

43. Did you use any method of birth control when you had your first sexual experience?

Yes —
No —

44. Did you feel you were adequately prepared for adult life and adult relationships?

a) yes, very well prepared —
b) well prepared —

Appendix E (cont'd)

c) adequately prepared ___
d) poorly prepared ___
e) not prepared at all ___

45. Was your pregnancy. . .

a) planned ___
b) not planned but wanted ___
c) accidental and not wanted ___

46. In your relationship with your child. . .

a) I don't want the child ___
b) I often find myself rejecting the child ___
c) I occasionally find myself rejecting the child ___
d) I rarely or never reject the child ___

47. If married, were you pregnant at the time of your marriage?

a) yes ___
b) no ___

IF YOU WERE PREGNANT OUT OF WEDLOCK PLEASE ANSWER THE FOLLOWING

48. Contact with the father of the child

a) a single social contact ___
b) a casual dating relationship ___
c) a steady dating relationship ___
d) engaged to marry ___

49. Support (non-financial) from father of child

a) father highly supportive and relationship still existing ___
b) father highly supportive but relationship now ended ___
c) father moderately supportive ___
d) father gave little support ___
e) father unsupportive, relationship ended ___

50. Present relationship with father of child

a) very close, appreciative ___
b) moderately close ___
c) indifferent ___
d) moderately hostile ___
e) highly hostile towards him ___

51. Residence during pregnancy

a) living alone ___
b) living with friends ___
c) living with family ___
d) living with father of child ___

Appendix E (cont'd)

e) in maternity home or community residence
f) other (please specify) ___

_____

52. Income source, first six months of pregnancy

a) employment
b) dependent (family, father of child) ___
c) social allowance ___
d) student/trainee loan or grant ___
e) other (please specify) ___

_____

53. Source of income, last three months of pregnancy

a) employment
b) social allowance ___
c) support from father of child ___
d) dependent of family ___
e) other (please specify) ___

_____

54. Contacts with social service agencies

a) had no contact
b) one contact ___
c) two different contacts ___
d) three or more contacts ___

55. After confirming the pregnancy, how many times did you see a doctor during the remainder of the pregnancy?

a) regular contact
b) one contact ___
c) 2 to 5 contacts ___
d) over 5 but not regular contact ___

56. If you received counselling during your pregnancy from a social worker or other professional counsellor did you find it. . .

a) very helpful
b) helpful ___
c) no help or hindrance ___
d) confusing or a hindrance ___
e) very confusing or a great hindrance ___

57. In the following list please rank the needs in terms of most to least important or pressing. Place the number 1 (one) next to the most important need and 2 (two) next to the second and so on to the least important. Please add needs you do not find listed.

Appendix E (cont'd)

increased income ___
increased training or schooling ___
social activity for you and child ___
better housing ___
help with income management ___
day care facilities ___
social activity with same sex ___
social activity, opposite sex ___
transportation ___
babysitting ___
education for child care ___
professional counselling ___
non-professional person to talk to ___
information on community services ___
legal aid ___
medical care ___

58. Reaction of family to pregnancy

| | During Pregnancy | At Present |
|---|---|---|
| a) highly supportive | ___ | ___ |
| b) supportive | ___ | ___ |
| c) indifferent | ___ | ___ |
| d) rejecting | ___ | ___ |
| e) highly rejecting | ___ | ___ |
| f) they don't know | ___ | ___ |

59. Do you presently have any outstanding personal goals?

a) educational improvement ___
b) job promotion ___
c) skill-trade training ___
d) marriage ___
e) no particular goals ___
f) other (please specify) ___

_____

60. How have you coped with pregnancy, single parenthood or surrender as they apply?

| | pregnancy | surrender | parenthood |
|---|---|---|---|
| a) very well | ___ | ___ | ___ |
| b) well | ___ | ___ | ___ |
| c) average | ___ | ___ | ___ |
| d) some difficulty | ___ | ___ | ___ |
| e) great difficulty | ___ | ___ | ___ |

# Appendix F

## Table 7

### Correlation Matrix of Variables of Parental Attitude Research Inventory (PARI)

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.000 | -0.466 | -0.329 | -0.327 | -0.386 | -0.286 | -0.030 | -0.121 | 0.003 | -0.438 | -0.301 | -0.200 | -0.083 | 0.443 | -0.224 | -0.231 | -0.229 | -0.327 | -0.287 | -0.299 | 0.299 | -0.486 | -0.108 |
| 2 | | 1.000 | 0.113 | 0.183 | 0.471 | 0.295 | 0.056 | -0.034 | 0.094 | 0.432 | 0.362 | 0.156 | 0.334 | -0.286 | 0.227 | 0.104 | 0.367 | 0.528 | 0.289 | 0.471 | 0.024 | 0.287 | 0.280 |
| 3 | | | 1.000 | 0.610 | 0.550 | 0.311 | 0.275 | 0.470 | 0.135 | 0.451 | 0.422 | 0.434 | 0.200 | -0.215 | 0.372 | 0.356 | 0.542 | 0.451 | 0.427 | 0.493 | -0.046 | 0.501 | 0.367 |
| 4 | | | | 1.000 | 0.514 | 0.232 | 0.284 | 0.546 | 0.180 | 0.525 | 0.486 | 0.269 | 0.258 | -0.223 | 0.389 | 0.294 | 0.462 | 0.398 | 0.379 | 0.347 | 0.119 | 0.419 | 0.432 |
| 5 | | | | | 1.000 | 0.293 | 0.239 | 0.292 | 0.052 | 0.625 | 0.583 | 0.323 | 0.343 | -0.187 | 0.424 | 0.418 | 0.544 | 0.550 | 0.389 | 0.625 | 0.130 | 0.526 | 0.451 |
| 6 | | | | | | 1.000 | 0.235 | 0.196 | 0.510 | 0.394 | 0.346 | 0.138 | 0.486 | -0.241 | 0.468 | 0.390 | 0.368 | 0.400 | 0.370 | 0.152 | 0.116 | 0.401 | 0.436 |
| 7 | | | | | | | 1.000 | 0.103 | 0.322 | 0.124 | 0.234 | 0.139 | 0.303 | -0.018 | 0.127 | 0.198 | 0.415 | 0.328 | 0.248 | 0.203 | 0.274 | 0.204 | 0.455 |
| 8 | | | | | | | | 1.000 | 0.239 | 0.376 | 0.453 | 0.383 | 0.036 | -0.003 | 0.296 | 0.295 | 0.277 | 0.285 | 0.263 | 0.142 | 0.168 | 0.163 | 0.326 |
| 9 | | | | | | | | | 1.000 | 0.159 | 0.227 | 0.085 | 0.542 | -0.049 | 0.214 | 0.253 | 0.276 | 0.134 | 0.279 | -0.023 | 0.281 | 0.045 | 0.369 |
| 10 | | | | | | | | | | 1.000 | 0.728 | 0.467 | 0.224 | -0.244 | 0.510 | 0.441 | 0.460 | 0.686 | 0.397 | 0.461 | 0.190 | 0.518 | 0.316 |
| 11 | | | | | | | | | | | 1.000 | 0.407 | 0.227 | -0.206 | 0.373 | 0.358 | 0.478 | 0.569 | 0.328 | 0.501 | 0.291 | 0.398 | 0.503 |
| 12 | | | | | | | | | | | | 1.000 | 0.274 | -0.050 | 0.427 | 0.473 | 0.381 | 0.544 | 0.381 | 0.297 | -0.010 | 0.504 | 0.272 |
| 13 | | | | | | | | | | | | | 1.000 | 0.006 | 0.394 | 0.476 | 0.484 | 0.424 | 0.430 | 0.162 | 0.169 | 0.357 | 0.555 |
| 14 | | | | | | | | | | | | | | 1.000 | 0.015 | 0.004 | -0.210 | -0.241 | -0.137 | -0.302 | 0.303 | -0.071 | -0.092 |
| 15 | | | | | | | | | | | | | | | 1.000 | 0.508 | 0.405 | 0.472 | 0.254 | 0.254 | 0.143 | 0.496 | 0.340 |
| 16 | | | | | | | | | | | | | | | | 1.000 | 0.277 | 0.547 | 0.333 | 0.145 | 0.095 | 0.504 | 0.327 |
| 17 | | | | | | | | | | | | | | | | | 1.000 | 0.495 | 0.314 | 0.489 | 0.133 | 0.452 | 0.590 |
| 18 | | | | | | | | | | | | | | | | | | 1.000 | 0.472 | 0.499 | -0.064 | 0.584 | 0.498 |
| 19 | | | | | | | | | | | | | | | | | | | 1.000 | 0.522 | 0.017 | 0.367 | 0.425 |
| 20 | | | | | | | | | | | | | | | | | | | | 1.000 | -0.001 | 0.429 | 0.340 |
| 21 | | | | | | | | | | | | | | | | | | | | | 1.000 | -0.139 | 0.196 |
| 22 | | | | | | | | | | | | | | | | | | | | | | 1.000 | 0.389 |
| 23 | | | | | | | | | | | | | | | | | | | | | | | 1.000 |

Appendix F (cont'd)

Table 8

Unrotated Factor Analysis Solution for PARI

| | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| 1 | -0.4778 | 0.5528 | 0.2147 | 0.1399 | 0.2110 | 0.1880 |
| 2 | 0.5044 | -0.2962 | -0.4766 | 0.2195 | 0.3209 | -0.2290 |
| 3 | 0.6869 | -0.1332 | 0.3046 | 0.0179 | -0.3092 | 0.2617 |
| 4 | 0.6643 | -0.0225 | 0.3105 | 0.1726 | -0.3293 | -0.0054 |
| 5 | 0.7605 | -0.1810 | 0.0709 | 0.2036 | 0.2080 | 0.0067 |
| 6 | 0.5785 | 0.2496 | -0.3914 | -0.2070 | -0.2326 | -0.2784 |
| 7 | 0.4017 | 0.3949 | -0.1063 | 0.2877 | -0.0983 | 0.4267 |
| 8 | 0.4704 | 0.1519 | 0.5897 | 0.0276 | -0.3712 | -0.1930 |
| 9 | 0.3487 | 0.6203 | -0.3151 | -0.0246 | -0.3498 | -0.1899 |
| 10 | 0.7783 | -0.1652 | 0.1559 | 0.0453 | 0.1448 | -0.3643 |
| 11 | 0.7324 | -0.0122 | 0.1970 | 0.2760 | 0.0923 | -0.3081 |
| 12 | 0.5843 | -0.0517 | 0.3136 | -0.3416 | 0.1540 | 0.1559 |
| 13 | 0.5614 | 0.4537 | -0.4399 | -0.1948 | 0.0978 | 0.1374 |
| 14 | -0.2726 | 0.4939 | 0.3452 | -0.1720 | 0.4726 | 0.1513 |
| 15 | 0.6293 | 0.1402 | 0.1089 | -0.3498 | 0.1645 | -0.1875 |
| 16 | 0.6043 | 0.1900 | 0.0965 | -0.5118 | 0.1156 | -0.0412 |
| 17 | 0.7218 | 0.0960 | -0.0776 | 0.2249 | -0.0152 | 0.2232 |
| 18 | 0.7982 | -0.1344 | -0.0680 | -0.1132 | 0.2019 | 0.0522 |
| 19 | 0.6187 | 0.0127 | -0.1210 | -0.0126 | -0.0923 | 0.2299 |
| 20 | 0.6231 | -0.3568 | -0.0310 | 0.3750 | 0.1832 | 0.2291 |
| 21 | 0.1326 | 0.6286 | 0.1917 | 0.4148 | 0.2968 | -0.3169 |
| 22 | 0.7027 | -0.1999 | 0.0134 | -0.3512 | 0.1401 | 0.1919 |
| 23 | 0.6776 | 0.3264 | -0.1324 | 0.1804 | -0.0477 | 0.1700 |

Appendix F (cont'd)

Table 9

Rotated Factor Analysis Solution for the PARI

| | I | II | III | IV | V | VI |
|---|---|---|---|---|---|---|
| 1 | -0.3717 | -0.0860 | 0.6762 | 0.2419 | 0.1310 | 0.0309 |
| 2 | 0.7796 | 0.1568 | -0.2379 | -0.0936 | 0.2335 | 0.1434 |
| 3 | 0.0755 | -0.0398 | -0.2629 | -0.3654 | -0.5620 | 0.4701 |
| 4 | 0.2122 | 0.0992 | -0.1457 | -0.1932 | -0.6672 | 0.3435 |
| 5 | 0.6075 | -0.0318 | -0.0668 | -0.3528 | -0.2482 | 0.3745 |
| 6 | 0.2113 | 0.7415 | -0.2060 | -0.2574 | -0.0946 | 0.1115 |
| 7 | -0.0110 | 0.2208 | 0.1583 | 0.0034 | -0.0914 | 0.7217 |
| 8 | 0.0135 | 0.1180 | 0.0723 | -0.2076 | -0.8385 | 0.0486 |
| 9 | -0.0425 | 0.8280 | 0.0872 | 0.0240 | -0.1544 | 0.2127 |
| 10 | 0.6660 | 0.1340 | -0.0704 | -0.4237 | -0.4070 | 0.0379 |
| 11 | 0.6431 | 0.1440 | 0.0728 | -0.2238 | -0.4838 | 0.1768 |
| 12 | 0.0979 | -0.0696 | 0.0025 | -0.7069 | -0.2462 | 0.1801 |
| 13 | 0.1168 | 0.6110 | 0.0821 | -0.3859 | 0.2096 | 0.4409 |
| 14 | -0.2773 | -0.1422 | 0.7368 | -0.2070 | 0.1562 | -0.0774 |
| 15 | 0.2574 | 0.2953 | 0.0784 | -0.6416 | -0.2019 | 0.0120 |
| 16 | 0.0695 | 0.3132 | 0.0481 | -0.7467 | -0.1449 | 0.0618 |
| 17 | 0.3382 | 0.1839 | -0.0478 | -0.2320 | -0.2098 | 0.6233 |
| 18 | 0.4710 | 0.1210 | -0.1568 | -0.5781 | -0.0969 | 0.3339 |
| 19 | 0.1742 | 0.1926 | -0.1946 | -0.3200 | -0.1314 | 0.4839 |
| 20 | 0.5742 | -0.2352 | -0.2024 | -0.1610 | -0.1125 | 0.5279 |
| 21 | 0.3097 | 0.2670 | 0.7548 | 0.1634 | -0.2078 | 0.0575 |
| 22 | 0.2288 | 0.0220 | -0.2444 | -0.7201 | -0.0695 | 0.2791 |
| 23 | 0.2453 | 0.3767 | 0.0792 | -0.2021 | -0.1853 | 0.6028 |

## Table 10

### Correlation Matrix of Variables for CPI

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1.000 | 0.590 | 0.578 | 0.421 | 0.615 | 0.255 | 0.174 | 0.201 | -0.157 | 0.254 | 0.148 | -0.109 | 0.271 | 0.340 | 0.354 | 0.503 | 0.050 | -0.160 |
| 2 | | 1.000 | 0.622 | 0.552 | 0.431 | 0.350 | 0.269 | 0.202 | 0.015 | 0.567 | 0.065 | -0.090 | 0.298 | 0.613 | 0.640 | 0.473 | 0.368 | -0.093 |
| 3 | | | 1.000 | 0.761 | 0.697 | 0.154 | 0.011 | 0.027 | -0.237 | 0.254 | -0.146 | -0.013 | 0.267 | 0.316 | 0.548 | 0.409 | 0.183 | -0.231 |
| 4 | | | | 1.000 | 0.646 | 0.154 | -0.188 | -0.209 | -0.393 | 0.199 | -0.355 | -0.034 | 0.105 | 0.351 | 0.571 | 0.322 | 0.559 | -0.284 |
| 5 | | | | | 1.000 | -0.109 | -0.168 | -0.082 | -0.536 | -0.099 | -0.378 | 0.013 | 0.060 | 0.130 | 0.296 | 0.160 | 0.121 | -0.097 |
| 6 | | | | | | 1.000 | 0.463 | 0.510 | 0.608 | 0.754 | 0.452 | 0.197 | 0.565 | 0.566 | 0.676 | 0.623 | 0.260 | -0.234 |
| 7 | | | | | | | 1.000 | 0.644 | 0.659 | 0.552 | 0.617 | 0.234 | 0.597 | 0.480 | 0.380 | 0.394 | -0.116 | 0.31 |
| 8 | | | | | | | | 1.000 | 0.629 | 0.475 | 0.515 | 0.253 | 0.572 | 0.325 | 0.328 | 0.348 | -0.101 | 0.310 |
| 9 | | | | | | | | | 1.000 | 0.610 | 0.801 | 0.252 | 0.526 | 0.285 | 0.181 | 0.323 | -0.124 | 0.241 |
| 10 | | | | | | | | | | 1.000 | 0.406 | 0.321 | 0.487 | 0.684 | 0.658 | 0.667 | 0.305 | -0.015 |
| 11 | | | | | | | | | | | 1.000 | 0.023 | 0.549 | 0.204 | 0.071 | 0.392 | -0.219 | 0.042 |
| 12 | | | | | | | | | | | | 1.000 | 0.164 | 0.175 | 0.215 | 0.020 | 0.011 | 0.208 |
| 13 | | | | | | | | | | | | | 1.000 | 0.442 | 0.556 | 0.420 | -0.049 | 0.105 |
| 14 | | | | | | | | | | | | | | 1.000 | 0.671 | 0.505 | 0.456 | -0.099 |
| 15 | | | | | | | | | | | | | | | 1.000 | 0.570 | 0.393 | -0.212 |
| 16 | | | | | | | | | | | | | | | | 1.000 | 0.081 | -0.243 |
| 17 | | | | | | | | | | | | | | | | | 1.000 | -0.321 |
| 18 | | | | | | | | | | | | | | | | | | 1.000 |

Appendix F (cont'd)

Table 11

Unrotated Factor Analysis Solution for the CPI

| | I | II | III | IV |
|---|---|---|---|---|
| 1 | 0.5149 | 0.4421 | 0.4747 | -0.2755 |
| 2 | 0.6889 | 0.4452 | 0.0902 | -0.0088 |
| 3 | 0.4848 | 0.6783 | 0.2962 | 0.0039 |
| 4 | 0.3754 | 0.8219 | -0.0794 | 0.1212 |
| 5 | 0.1805 | 0.7595 | 0.4757 | 0.1435 |
| 6 | 0.8054 | -0.1899 | -0.3064 | -0.1257 |
| 7 | 0.6496 | -0.5110 | 0.2212 | 0.1040 |
| 8 | 0.5966 | -0.4828 | 0.2765 | 0.1332 |
| 9 | 0.5200 | -0.7823 | -0.1047 | -0.0389 |
| 10 | 0.8564 | -0.1547 | -0.2486 | 0.0997 |
| 11 | 0.4768 | -0.6458 | 0.1211 | -0.4057 |
| 12 | 0.2214 | -0.2133 | -0.0570 | 0.7130 |
| 13 | 0.7144 | -0.2529 | 0.2376 | 0.0015 |
| 14 | 0.7770 | 0.1148 | -0.2320 | 0.1489 |
| 15 | 0.8221 | 0.2849 | -0.1564 | 0.1596 |
| 16 | 0.7596 | 0.0753 | 0.0243 | -0.3323 |
| 17 | 0.2822 | 0.4368 | -0.6545 | 0.1831 |
| 18 | -0.0851 | -0.4162 | 0.4749 | 0.5621 |

Appendix F (cont'd)

Table 12

Rotated Factor Analysis Solution for the CPI

| | I | II | III | IV |
|---|---|---|---|---|
| 1 | 0.2680 | 0.7935 | 0.0498 | -0.2404 |
| 2 | 0.2818 | 0.6621 | -0.3987 | -0.0652 |
| 3 | 0.0217 | 0.8556 | -0.2156 | -0.0624 |
| 4 | -0.2346 | 0.7050 | -0.5304 | -0.0642 |
| 5 | -0.2540 | 0.8857 | 0.0131 | 0.0849 |
| 6 | 0.6985 | 0.0367 | -0.5378 | -0.1266 |
| 7 | 0.8177 | 0.0385 | -0.0017 | 0.2695 |
| 8 | 0.7648 | 0.0672 | 0.0513 | 0.3020 |
| 9 | 0.8486 | -0.3942 | -0.0759 | 0.1166 |
| 10 | 0.6843 | 0.1202 | -0.5809 | 0.0947 |
| 11 | 0.8436 | -0.1973 | 0.1646 | -0.2142 |
| 12 | 0.1510 | -0.0747 | -0.2506 | 0.7176 |
| 13 | 0.7372 | 0.2573 | -0.0774 | 0.1228 |
| 14 | 0.4581 | 0.2885 | -0.6263 | 0.0869 |
| 15 | 0.4034 | 0.4713 | -0.6448 | 0.0790 |
| 16 | 0.6037 | 0.3857 | -0.2919 | -0.3089 |
| 17 | -0.1909 | 0.0725 | -0.8294 | -0.0508 |
| 18 | 0.1577 | -0.0583 | 0.4131 | 0.7232 |